

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: LUMARK

Report Number: P980913

Luminaire Tested: **NFFLD-S-C70-7040-33**

Issue Date: 04/10/2025



**Test Information**

Test Method: LM-79-08  
Report Number: P980913  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 04/10/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NFFLD-S-C70-7040-33  
Description: NIGHT FALCON SMALL SIZE 30W 70CRI 4000K LED FIXTURE NEMA 3  
Light Source: (2) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

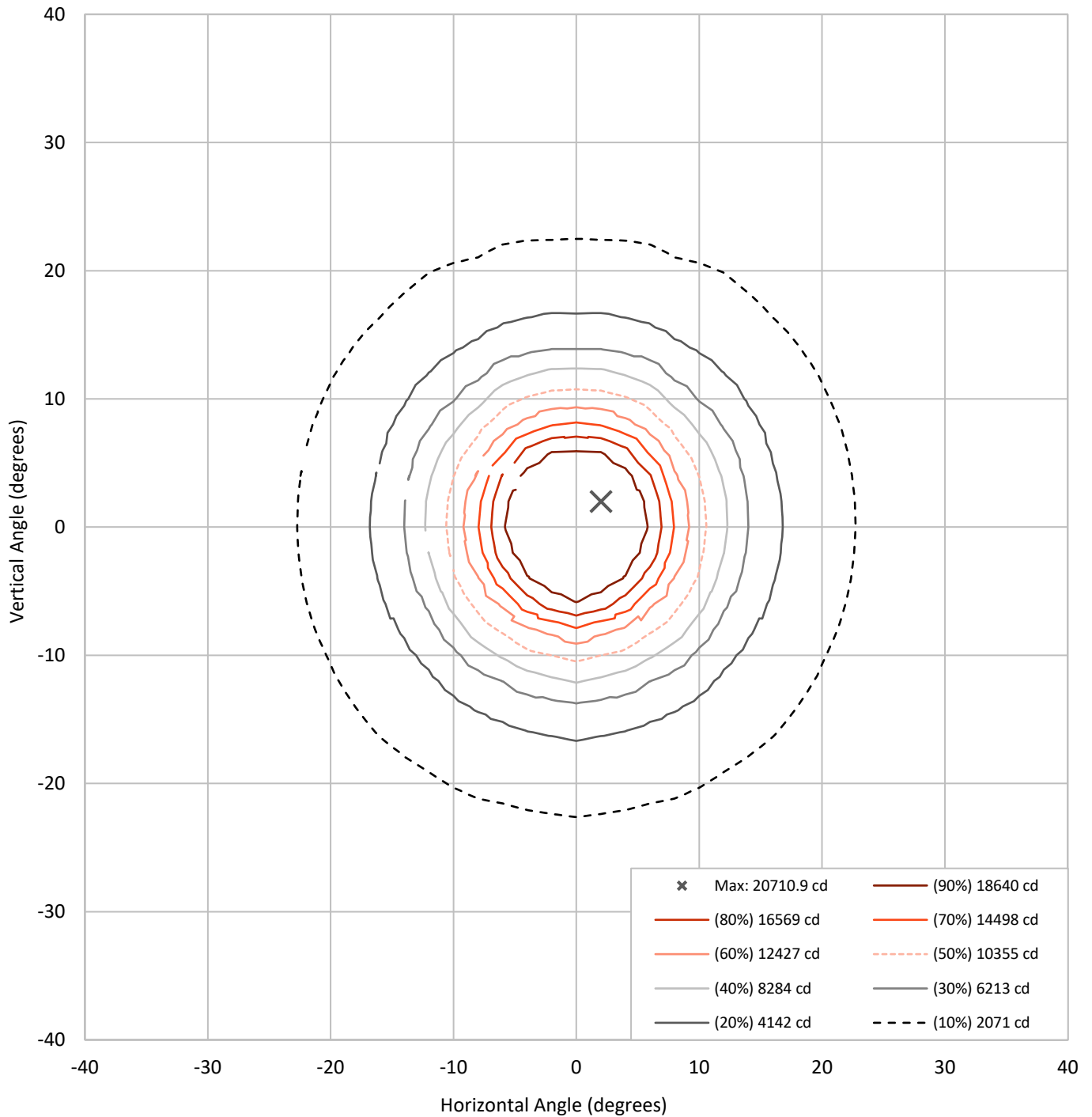
**Summary**

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	3785.9 lumens	Max Intensity:	20710.9 candela
Efficiency:	N/A	Max Intensity Angle:	2°H x 2°V
Efficacy:	120.2 lumens/watt		
Luminous Opening:	Rectangular (W 0.3' x L: 0.14' x H: 0')		
Beam Angle (50%):	20.9°H x 20.7°V	Field Angle (10%):	45.3°H x 44.8°V
Beam Lumens:	1639.4 lumens	Field Lumens:	3339.5 lumens
Beam Efficiency:	43.3%	Field Efficiency:	88.2%

Input Watts (W): 31.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 10.65%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Iso-Candela Plot





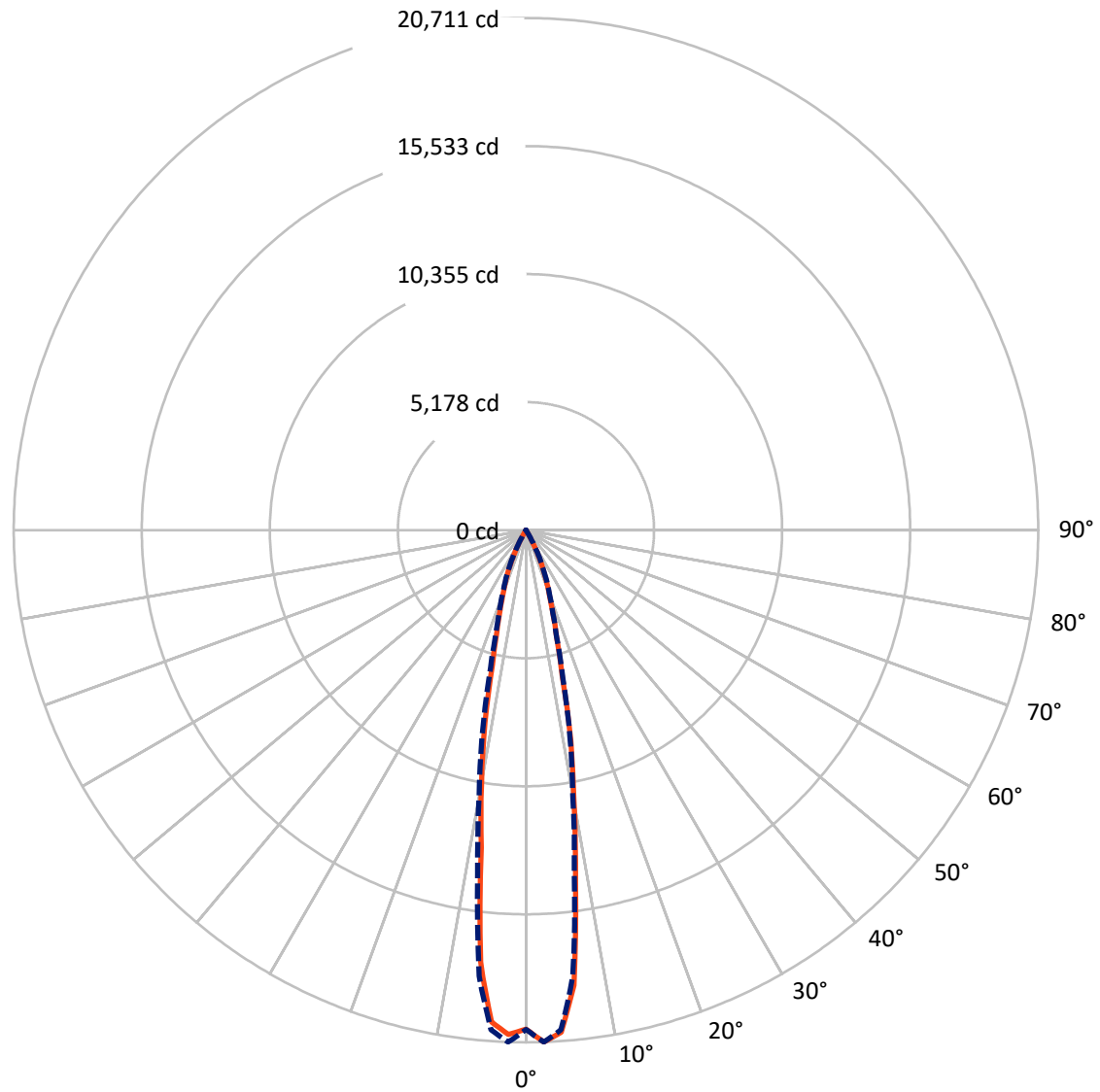
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### Lumen Table

90																			
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
70																			
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
50		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
30		0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.0	0.3	0.0	0.0	0.0	0.0					
20	0.0	0.0	0.0	0.0	0.0	2.1	19.8	40.0	40.0	19.8	2.1	0.0	0.0	0.0	0.0				
10		0.0	0.0	0.0	0.4	19.4	76.6	157.1	157.1	76.6	19.4	0.4	0.0	0.0		0.0			
0	0.0	0.0	0.0	0.0	1.7	38.9	153.3	455.9	455.9	153.3	38.9	1.7	0.0	0.0	0.0				
-10		0.0	0.0	0.0	1.6	38.1	147.9	439.2	439.2	147.9	38.1	1.6	0.0	0.0		0.0			
-20	0.0	0.0	0.0	0.0	0.3	18.0	73.4	147.5	147.5	73.4	18.0	0.3	0.0	0.0	0.0				
-30		0.0	0.0	0.0	0.0	1.7	18.5	39.1	39.1	18.5	1.7	0.0	0.0	0.0		0.0			
-40	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1	1.1	0.2	0.0	0.0	0.0	0.0	0.0				
-50		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0			
-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
-70		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0			
-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
-90																			
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90

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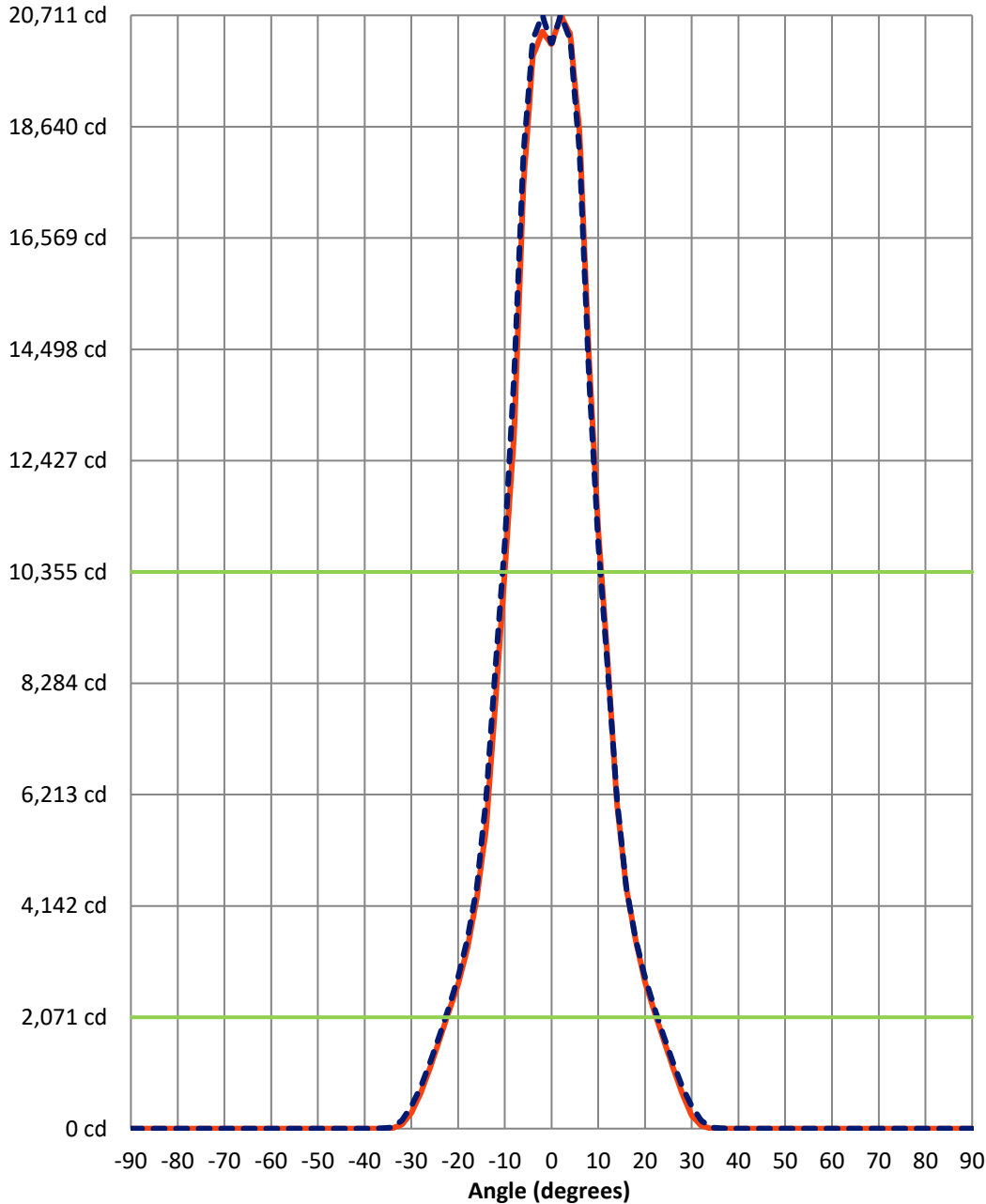
### Luminous Intensity Polar Plot



— Vertical Distribution Through 2-Deg      - - - Horizontal Distribution Through 2-Deg

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### Luminous Intensity Plot



**Beam:**  
H Angle: 20.9°  
V Angle: 20.7°  
Lumens: 1639.4  
Efficiency: 43.3%

**Field:**  
H Angle: 45.3°  
V Angle: 44.8°  
Lumens: 3339.5  
Efficiency: 88.2%

**Spill:**  
Lumens: 446.4  
Efficiency: 11.8%

— Vertical Distribution through 2-Deg  
- - Horizontal Distribution through 2-Deg



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FIELD  
 BEAM

**CANDELA DISTRIBUTION:**

	0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34°	2.0	3.9	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32°	49.8	57.6	54.7	69.3	44.9	46.9	23.4	2.9	0.0	0.0	0.0
30°	228.4	243.1	236.2	266.5	178.7	183.5	131.8	65.4	29.3	7.8	0.0
28°	634.6	647.2	618.9	612.1	466.6	452.0	367.1	223.6	128.9	64.4	16.6
26°	1124.6	1131.5	1105.1	1074.8	877.6	839.6	715.6	482.3	329.0	198.2	98.6
24°	1655.7	1649.8	1631.3	1572.7	1350.1	1282.8	1136.3	848.4	626.7	424.7	266.5
22°	2201.4	2179.9	2163.3	2082.3	1844.1	1746.5	1585.4	1267.2	986.0	727.3	509.6
20°	2749.1	2727.6	2695.4	2601.7	2320.5	2209.2	2038.4	1710.4	1382.4	1085.6	797.6
18°	3490.1	3509.6	3421.7	3252.8	2877.0	2682.7	2453.3	2124.3	1773.8	1442.9	1109.0
16°	4465.3	4483.9	4289.6	4064.1	3548.6	3283.1	2926.8	2511.9	2133.1	1801.2	1435.1
14°	6072.2	6056.6	5681.7	5241.4	4434.1	3958.7	3501.8	2960.9	2481.6	2112.6	1726.0
12°	8800.8	8712.0	8091.1	7218.3	5674.9	4815.8	4157.8	3460.8	2847.7	2398.6	1984.7
10°	11274.6	11148.7	10551.2	9528.1	7602.0	6055.6	4938.8	3988.9	3253.8	2698.3	2211.2
8°	14773.4	14366.3	13054.3	11458.1	9664.8	7725.0	6010.7	4571.7	3637.5	2971.7	2422.1
6°	18569.1	18506.6	16968.0	13990.5	11243.4	9281.1	7138.3	5220.9	3989.9	3211.8	2594.8
4°	20430.7	20352.6	19325.6	16737.6	12697.9	10326.7	8047.1	5771.5	4282.8	3399.3	2720.8
2°	20192.5	20710.9	20254.0	18129.7	14022.7	10892.9	8570.4	6141.5	4479.0	3526.2	2814.5



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**CANDELA DISTRIBUTION (continued):**

	0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°
0°	20077.3	20175.0	20318.5	18452.9	14401.5	11048.1	8652.4	6215.7	4536.6	3561.3	2829.1
-2°	20588.9	20406.3	19919.2	17725.6	13745.5	10785.5	8309.8	5973.6	4439.9	3498.8	2775.4
-4°	20376.1	19939.7	18498.8	15638.4	12328.9	10149.0	7530.7	5498.2	4221.3	3360.2	2673.9
-6°	18498.8	17561.6	15560.3	12734.1	10893.9	8918.9	6509.6	4912.4	3907.9	3155.2	2524.6
-8°	14218.9	12960.6	12090.7	10668.3	9309.4	7275.9	5444.5	4326.7	3549.6	2908.2	2351.8
-10°	10963.2	10363.8	9817.1	8540.1	7251.5	5759.8	4540.5	3773.2	3168.9	2635.8	2147.7
-12°	8444.5	7932.9	7284.7	6245.0	5463.0	4630.3	3830.8	3276.3	2800.8	2363.5	1930.0
-14°	5912.1	5593.9	5268.8	4726.0	4316.9	3796.6	3236.2	2810.6	2459.1	2072.6	1661.6
-16°	4459.5	4285.7	4098.3	3756.6	3507.6	3137.6	2719.8	2418.1	2136.0	1766.0	1371.6
-18°	3508.6	3351.4	3238.2	3026.3	2858.4	2586.1	2304.9	2050.1	1776.8	1408.7	1050.4
-20°	2762.8	2680.8	2585.1	2454.3	2359.6	2147.7	1881.2	1635.2	1383.3	1043.6	741.0
-22°	2236.6	2169.2	2089.2	1962.2	1868.5	1671.3	1419.5	1232.0	1002.6	706.8	467.6
-24°	1709.4	1645.0	1574.7	1452.6	1361.9	1190.0	976.2	826.9	648.2	401.2	230.4
-26°	1193.9	1129.5	1072.9	958.7	883.5	742.9	581.8	471.5	336.8	170.8	78.1
-28°	718.5	658.0	619.9	520.3	467.6	369.0	275.3	203.1	128.9	50.8	9.8
-30°	330.0	291.9	268.5	203.1	178.7	123.0	83.0	57.6	29.3	4.9	0.0
-32°	95.7	77.1	65.4	47.8	43.9	23.4	8.8	2.9	1.0	0.0	0.0
-34°	14.6	8.8	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-36°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-38°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-42°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-44°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-46°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-48°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-52°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-54°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-56°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-58°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-62°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-64°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-66°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-68°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-72°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P980913

CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	22°	24°	26°	28°	30°	32°	34°	36°	38°	40°	42°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28°	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26°	44.9	7.8	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24°	140.6	42.0	16.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22°	308.5	125.0	54.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	526.2	279.2	132.8	13.7	7.8	0.0	0.0	0.0	0.0	0.0	0.0
18°	775.1	471.5	248.0	54.7	29.3	0.0	0.0	0.0	0.0	0.0	0.0
16°	1042.6	682.4	396.4	136.7	71.3	0.0	0.0	0.0	0.0	0.0	0.0
14°	1292.5	897.2	557.4	253.8	123.0	12.7	0.0	0.0	0.0	0.0	0.0
12°	1539.5	1108.0	719.5	375.9	185.5	33.2	0.0	0.0	0.0	0.0	0.0
10°	1757.2	1297.4	871.8	492.0	247.0	58.6	1.0	1.0	0.0	0.0	0.0
8°	1938.8	1456.5	1001.6	593.6	305.6	90.8	6.8	2.9	0.0	0.0	0.0
6°	2083.3	1584.4	1108.0	676.5	355.4	119.1	12.7	4.9	0.0	0.0	0.0
4°	2183.8	1674.3	1186.1	738.0	393.4	141.6	17.6	7.8	0.0	0.0	0.0
2°	2245.4	1723.1	1229.1	772.2	414.9	155.2	21.5	8.8	0.0	0.0	0.0



REPORT NUMBER: P980913

CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	22°	24°	26°	28°	30°	32°	34°	36°	38°	40°	42°
0°	2261.9	1737.7	1240.8	781.0	421.7	160.1	22.5	9.8	0.0	0.0	0.0
-2°	2232.7	1714.3	1218.3	761.5	408.1	153.3	21.5	8.8	0.0	0.0	0.0
-4°	2162.4	1651.8	1159.8	716.6	379.8	136.7	17.6	7.8	0.0	0.0	0.0
-6°	2053.0	1552.2	1070.9	646.3	335.8	112.3	11.7	4.9	0.0	0.0	0.0
-8°	1904.6	1416.5	956.7	555.5	281.2	83.0	5.9	2.9	0.0	0.0	0.0
-10°	1715.3	1244.7	817.1	450.0	221.6	52.7	1.0	0.0	0.0	0.0	0.0
-12°	1493.6	1045.6	659.0	332.9	161.1	29.3	0.0	0.0	0.0	0.0	0.0
-14°	1242.8	827.9	492.0	209.9	101.5	10.7	0.0	0.0	0.0	0.0	0.0
-16°	975.3	606.2	332.9	95.7	50.8	0.0	0.0	0.0	0.0	0.0	0.0
-18°	708.8	394.4	197.2	32.2	17.6	0.0	0.0	0.0	0.0	0.0	0.0
-20°	460.8	207.0	95.7	6.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0
-22°	256.8	71.3	33.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-24°	109.3	22.5	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-26°	32.2	2.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-28°	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-32°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-34°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-36°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-38°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-42°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-44°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-46°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-48°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-52°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-54°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-56°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-58°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-62°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-64°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-66°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-68°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-72°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P980913

CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	22°	24°	26°	28°	30°	32°	34°	36°	38°	40°	42°
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P980913

CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	44°	46°	48°	50°	52°	54°	56°	58°	60°	62°	64°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P980913

CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	44°	46°	48°	50°	52°	54°	56°	58°	60°	62°	64°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-2°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-4°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-6°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-8°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-12°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-14°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-16°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-18°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-22°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-24°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-26°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-28°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-32°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-34°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-36°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-38°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-42°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-44°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-46°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-48°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-52°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-54°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-56°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-58°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-62°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-64°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-66°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-68°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-72°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P980913

CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	44°	46°	48°	50°	52°	54°	56°	58°	60°	62°	64°
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P980913

CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	66°	68°	70°	72°	74°	76°	78°	80°	82°	84°	86°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P980913

CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	66°	68°	70°	72°	74°	76°	78°	80°	82°	84°	86°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-2°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-4°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-6°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-8°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-12°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-14°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-16°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-18°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-22°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-24°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-26°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-28°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-32°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-34°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-36°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-38°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-42°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-44°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-46°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-48°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-52°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-54°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-56°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-58°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-62°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-64°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-66°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-68°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-72°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P980913

CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	66°	68°	70°	72°	74°	76°	78°	80°	82°	84°	86°
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P980913  
CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	88°	90°
90°	0.0	0.0
88°	0.0	0.0
86°	0.0	0.0
84°	0.0	0.0
82°	0.0	0.0
80°	0.0	0.0
78°	0.0	0.0
76°	0.0	0.0
74°	0.0	0.0
72°	0.0	0.0
70°	0.0	0.0
68°	0.0	0.0
66°	0.0	0.0
64°	0.0	0.0
62°	0.0	0.0
60°	0.0	0.0
58°	0.0	0.0
56°	0.0	0.0
54°	0.0	0.0
52°	0.0	0.0
50°	0.0	0.0
48°	0.0	0.0
46°	0.0	0.0
44°	0.0	0.0
42°	0.0	0.0
40°	0.0	0.0
38°	0.0	0.0
36°	0.0	0.0
34°	0.0	0.0
32°	0.0	0.0
30°	0.0	0.0
28°	0.0	0.0
26°	0.0	0.0
24°	0.0	0.0
22°	0.0	0.0
20°	0.0	0.0
18°	0.0	0.0
16°	0.0	0.0
14°	0.0	0.0
12°	0.0	0.0
10°	0.0	0.0
8°	0.0	0.0
6°	0.0	0.0
4°	0.0	0.0
2°	0.0	0.0



REPORT NUMBER: P980913

CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	88°	90°
0°	0.0	0.0
-2°	0.0	0.0
-4°	0.0	0.0
-6°	0.0	0.0
-8°	0.0	0.0
-10°	0.0	0.0
-12°	0.0	0.0
-14°	0.0	0.0
-16°	0.0	0.0
-18°	0.0	0.0
-20°	0.0	0.0
-22°	0.0	0.0
-24°	0.0	0.0
-26°	0.0	0.0
-28°	0.0	0.0
-30°	0.0	0.0
-32°	0.0	0.0
-34°	0.0	0.0
-36°	0.0	0.0
-38°	0.0	0.0
-40°	0.0	0.0
-42°	0.0	0.0
-44°	0.0	0.0
-46°	0.0	0.0
-48°	0.0	0.0
-50°	0.0	0.0
-52°	0.0	0.0
-54°	0.0	0.0
-56°	0.0	0.0
-58°	0.0	0.0
-60°	0.0	0.0
-62°	0.0	0.0
-64°	0.0	0.0
-66°	0.0	0.0
-68°	0.0	0.0
-70°	0.0	0.0
-72°	0.0	0.0
-74°	0.0	0.0
-76°	0.0	0.0
-78°	0.0	0.0
-80°	0.0	0.0
-82°	0.0	0.0
-84°	0.0	0.0
-86°	0.0	0.0
-88°	0.0	0.0



REPORT NUMBER: P980913  
CATALOG NUMBER: NFFLD-S-C70-7040-33

**CANDELA DISTRIBUTION (continued):**

	88°	90°
-90°	0.0	0.0

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2501-319-6

Test Date: 02/05/2025

Luminaire Tested: NFFLD-C25-7040-33

Data in this report applies to families of products including NFFLD-C25-7040-33

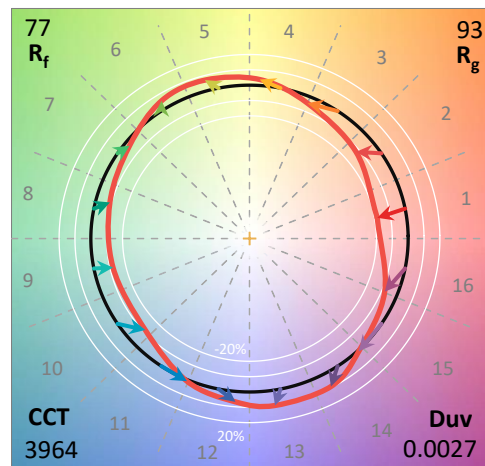
**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2501-319-6  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 02/06/2025  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Lumark  
 Catalog Number: **NFFLD-C25-7040-33**  
 Description: LUMARK NIGHT FALCON 10500LM NEMA 3

**Spectral Parameters**

CCT (K): 3964  
 CIE u': 0.2242  
 CIE v': 0.5057  
 Duv: 0.0027  
 CIE x: 0.3840  
 CIE y: 0.3849  
 CIE z: 0.2311  
 Peak Wavelength (nm): 446  
 Dominant Wavelength (nm): 577  
 Purity: 30.76983  
 Rf: 76.7  
 Rg: 92.6

CRI (Ra):	72.6		
R1:	67.8	R9:	-43.1
R2:	80.8	R10:	56.8
R3:	92.3	R11:	67.5
R4:	70.7	R12:	52.2
R5:	69.3	R13:	70.3
R6:	74.2	R14:	95.9
R7:	79.4	R15:	58.4
R8:	46.4		



**Test Conditions**

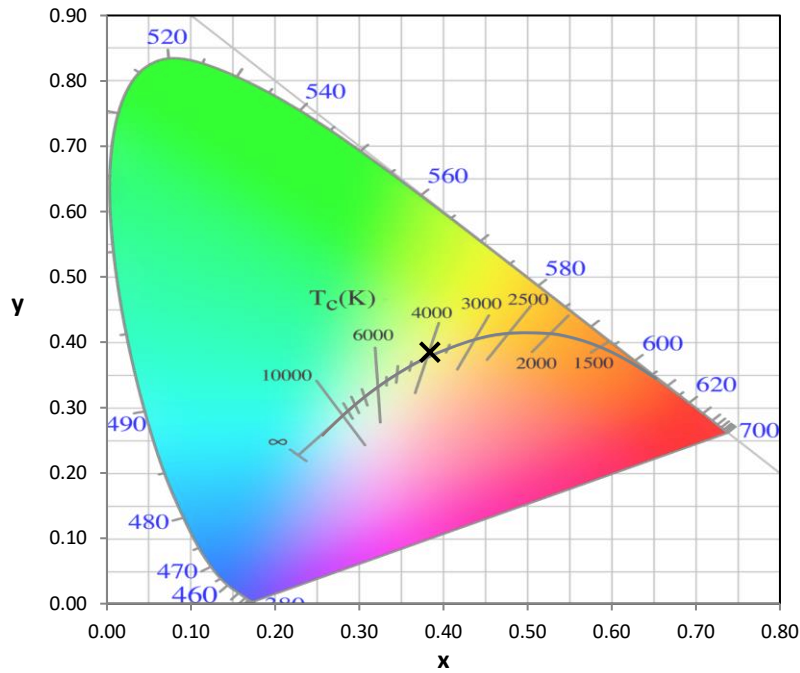
Stabilization Time: 42M  
 Operation Time: 1H 42M  
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2501-319-6

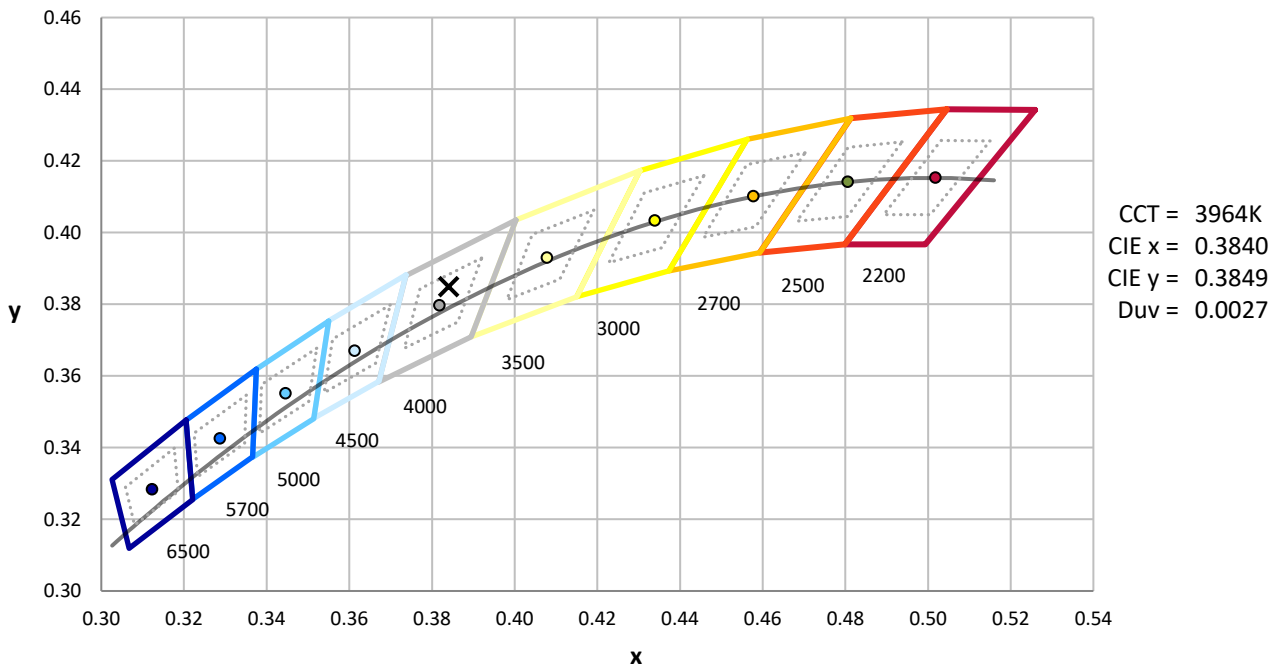
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	12/16/2024	6/16/2025
Power Meter	INXT2011004	1/21/2025	1/21/2026
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085	10/22/2024	10/22/2025
Room Thermometer	IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2501-319-6

**CIE 1931 Chromaticity Diagram**



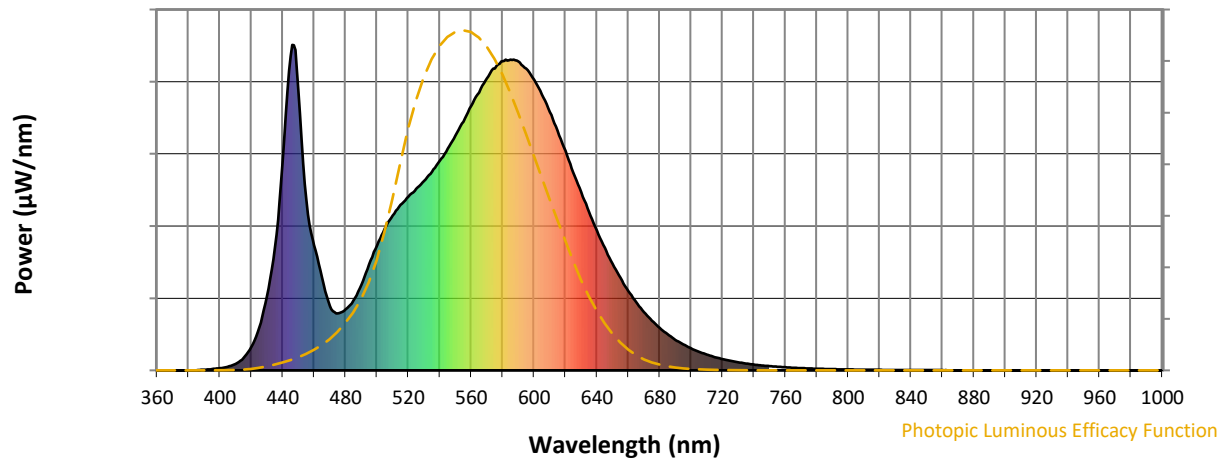
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2501-319-6

**Photopic Flux vs. Wavelength**

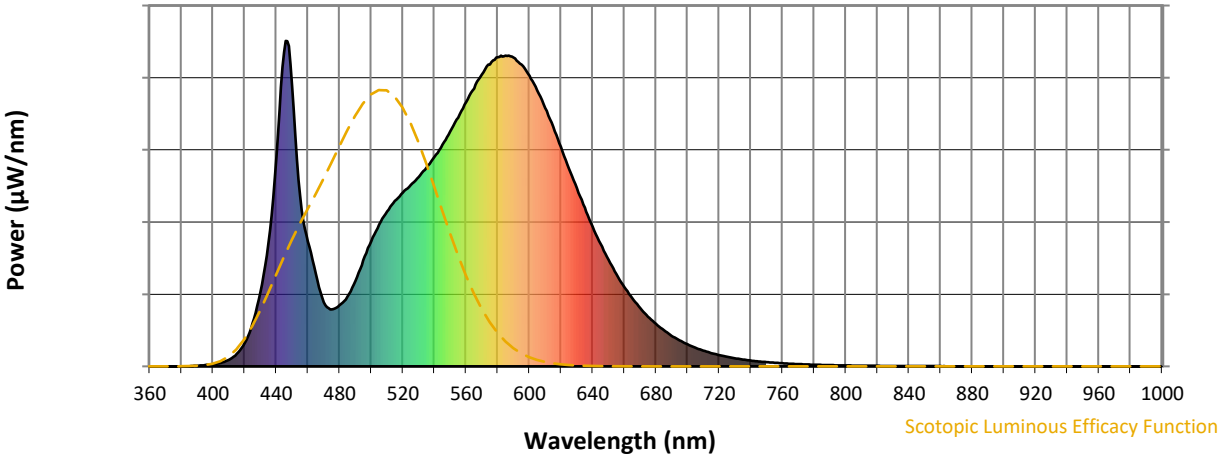


**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	262	NR	620	674	NR	750	13	NR	880	0	NR
365	0	NR	495	326	NR	625	608	NR	755	11	NR	885	0	NR
370	0	NR	500	384	NR	630	548	NR	760	9	NR	890	0	NR
375	0	NR	505	435	NR	635	487	NR	765	8	NR	895	0	NR
380	0	NR	510	475	NR	640	430	NR	770	7	NR	900	0	NR
385	0	NR	515	508	NR	645	377	NR	775	6	NR	905	0	NR
390	2	NR	520	534	NR	650	327	NR	780	5	NR	910	0	NR
395	4	NR	525	557	NR	655	284	NR	785	4	NR	915	0	NR
400	7	NR	530	582	NR	660	243	NR	790	4	NR	920	0	NR
405	11	NR	535	611	NR	665	210	NR	795	3	NR	925	0	NR
410	20	NR	540	644	NR	670	179	NR	800	3	NR	930	0	NR
415	38	NR	545	681	NR	675	153	NR	805	2	NR	935	0	NR
420	71	NR	550	721	NR	680	131	NR	810	2	NR	940	0	NR
425	132	NR	555	764	NR	685	111	NR	815	2	NR	945	0	NR
430	228	NR	560	812	NR	690	94	NR	820	2	NR	950	0	NR
435	378	NR	565	854	NR	695	80	NR	825	1	NR	955	0	NR
440	643	NR	570	897	NR	700	68	NR	830	1	NR	960	0	NR
445	965	NR	575	927	NR	705	57	NR	835	1	NR	965	0	NR
450	860	NR	580	950	NR	710	48	NR	840	1	NR	970	0	NR
455	525	NR	585	955	NR	715	41	NR	845	1	NR	975	0	NR
460	385	NR	590	949	NR	720	35	NR	850	1	NR	980	0	NR
465	285	NR	595	927	NR	725	29	NR	855	1	NR	985	0	NR
470	197	NR	600	893	NR	730	25	NR	860	1	NR	990	0	NR
475	175	NR	605	847	NR	735	21	NR	865	1	NR	995	0	NR
480	188	NR	610	794	NR	740	18	NR	870	0	NR	1000	0	NR
485	215	NR	615	736	NR	745	15	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



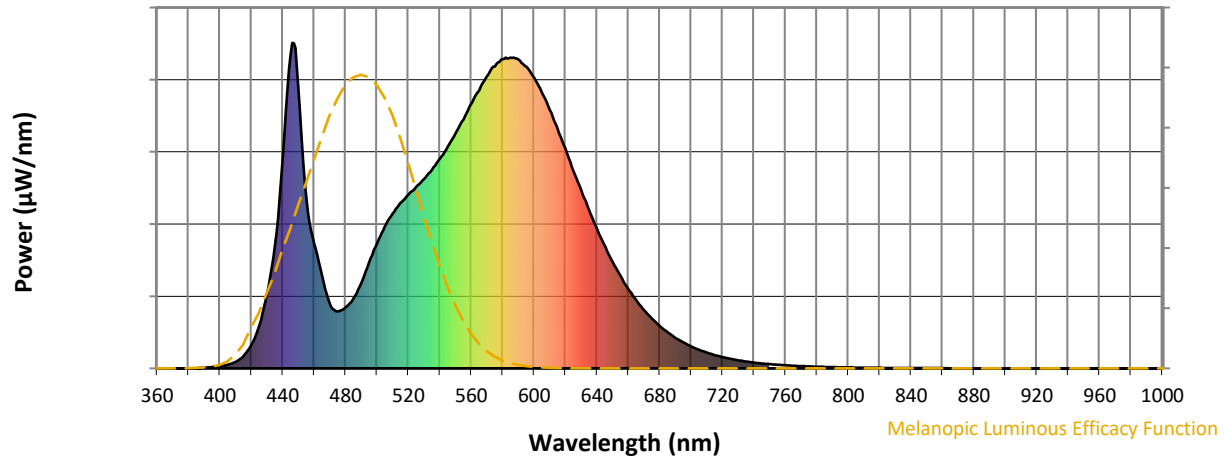
**Scotopic Lumens: NR**

**S/P: 1.56**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	262	NR	620	674	NR	750	13	NR	880	0	NR
365	0	NR	495	326	NR	625	608	NR	755	11	NR	885	0	NR
370	0	NR	500	384	NR	630	548	NR	760	9	NR	890	0	NR
375	0	NR	505	435	NR	635	487	NR	765	8	NR	895	0	NR
380	0	NR	510	475	NR	640	430	NR	770	7	NR	900	0	NR
385	0	NR	515	508	NR	645	377	NR	775	6	NR	905	0	NR
390	2	NR	520	534	NR	650	327	NR	780	5	NR	910	0	NR
395	4	NR	525	557	NR	655	284	NR	785	4	NR	915	0	NR
400	7	NR	530	582	NR	660	243	NR	790	4	NR	920	0	NR
405	11	NR	535	611	NR	665	210	NR	795	3	NR	925	0	NR
410	20	NR	540	644	NR	670	179	NR	800	3	NR	930	0	NR
415	38	NR	545	681	NR	675	153	NR	805	2	NR	935	0	NR
420	71	NR	550	721	NR	680	131	NR	810	2	NR	940	0	NR
425	132	NR	555	764	NR	685	111	NR	815	2	NR	945	0	NR
430	228	NR	560	812	NR	690	94	NR	820	2	NR	950	0	NR
435	378	NR	565	854	NR	695	80	NR	825	1	NR	955	0	NR
440	643	NR	570	897	NR	700	68	NR	830	1	NR	960	0	NR
445	965	NR	575	927	NR	705	57	NR	835	1	NR	965	0	NR
450	860	NR	580	950	NR	710	48	NR	840	1	NR	970	0	NR
455	525	NR	585	955	NR	715	41	NR	845	1	NR	975	0	NR
460	385	NR	590	949	NR	720	35	NR	850	1	NR	980	0	NR
465	285	NR	595	927	NR	725	29	NR	855	1	NR	985	0	NR
470	197	NR	600	893	NR	730	25	NR	860	1	NR	990	0	NR
475	175	NR	605	847	NR	735	21	NR	865	1	NR	995	0	NR
480	188	NR	610	794	NR	740	18	NR	870	0	NR	1000	0	NR
485	215	NR	615	736	NR	745	15	NR	875	0	NR			

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**Melanopic Flux vs. Wavelength**



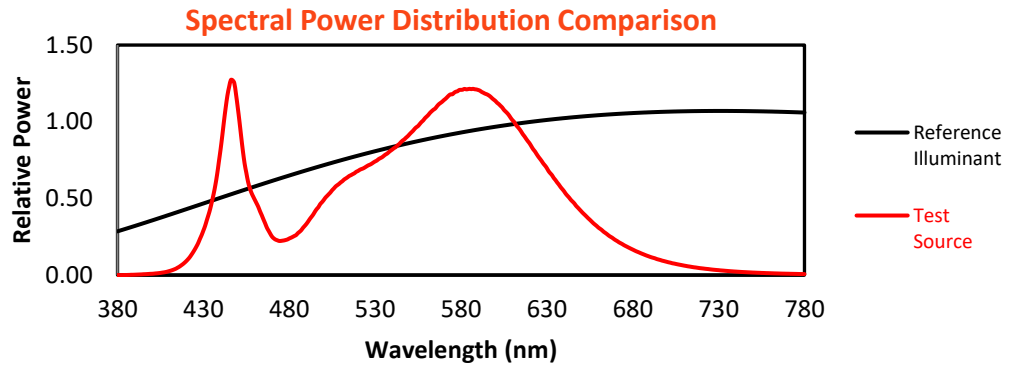
**Melanopic Lumens: NR**

**M/P: 3.08**

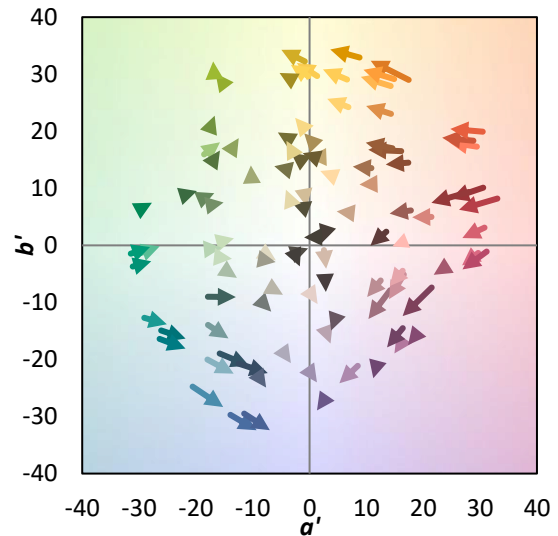
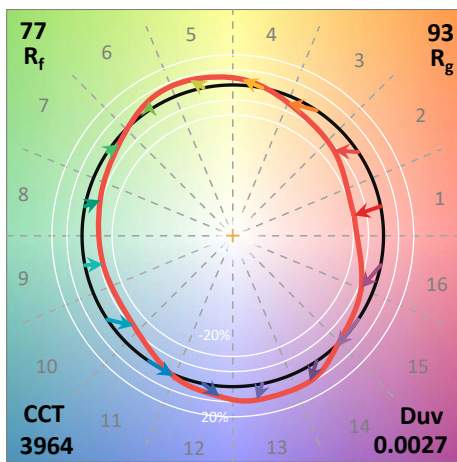
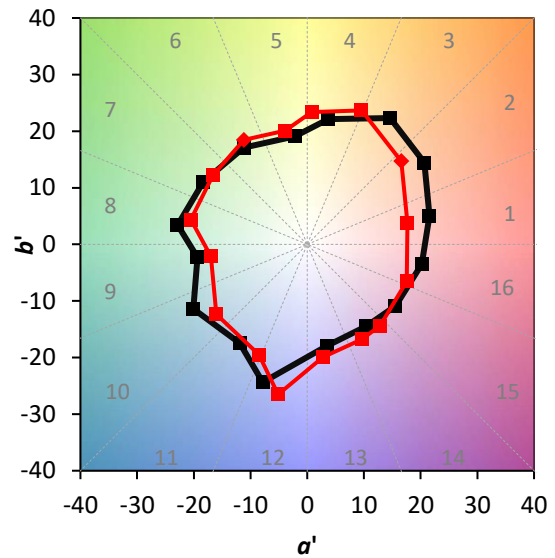
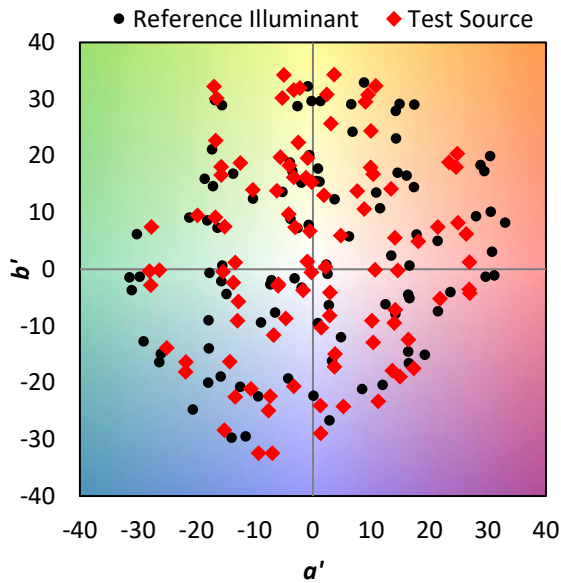
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	262	NR	620	674	NR	750	13	NR	880	0	NR
365	0	NR	495	326	NR	625	608	NR	755	11	NR	885	0	NR
370	0	NR	500	384	NR	630	548	NR	760	9	NR	890	0	NR
375	0	NR	505	435	NR	635	487	NR	765	8	NR	895	0	NR
380	0	NR	510	475	NR	640	430	NR	770	7	NR	900	0	NR
385	0	NR	515	508	NR	645	377	NR	775	6	NR	905	0	NR
390	2	NR	520	534	NR	650	327	NR	780	5	NR	910	0	NR
395	4	NR	525	557	NR	655	284	NR	785	4	NR	915	0	NR
400	7	NR	530	582	NR	660	243	NR	790	4	NR	920	0	NR
405	11	NR	535	611	NR	665	210	NR	795	3	NR	925	0	NR
410	20	NR	540	644	NR	670	179	NR	800	3	NR	930	0	NR
415	38	NR	545	681	NR	675	153	NR	805	2	NR	935	0	NR
420	71	NR	550	721	NR	680	131	NR	810	2	NR	940	0	NR
425	132	NR	555	764	NR	685	111	NR	815	2	NR	945	0	NR
430	228	NR	560	812	NR	690	94	NR	820	2	NR	950	0	NR
435	378	NR	565	854	NR	695	80	NR	825	1	NR	955	0	NR
440	643	NR	570	897	NR	700	68	NR	830	1	NR	960	0	NR
445	965	NR	575	927	NR	705	57	NR	835	1	NR	965	0	NR
450	860	NR	580	950	NR	710	48	NR	840	1	NR	970	0	NR
455	525	NR	585	955	NR	715	41	NR	845	1	NR	975	0	NR
460	385	NR	590	949	NR	720	35	NR	850	1	NR	980	0	NR
465	285	NR	595	927	NR	725	29	NR	855	1	NR	985	0	NR
470	197	NR	600	893	NR	730	25	NR	860	1	NR	990	0	NR
475	175	NR	605	847	NR	735	21	NR	865	1	NR	995	0	NR
480	188	NR	610	794	NR	740	18	NR	870	0	NR	1000	0	NR
485	215	NR	615	736	NR	745	15	NR	875	0	NR			

**Summary**

$R_f = 76.7$   
 $R_g = 92.6$   
 CIE  $R_a = 72.6$   
 $R_g = -43.1$

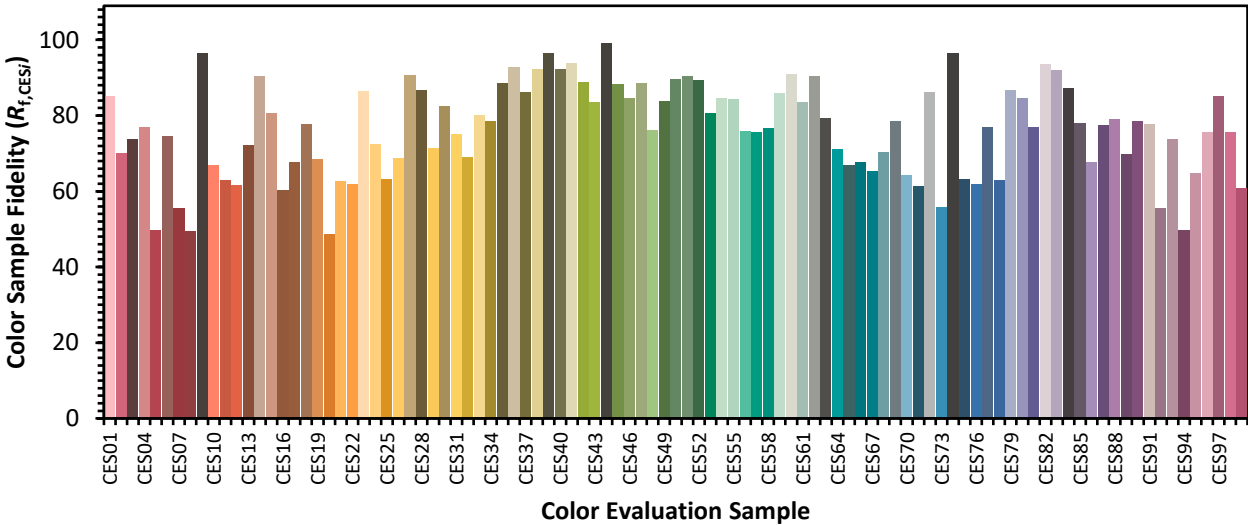


**Color Vector Graphics**

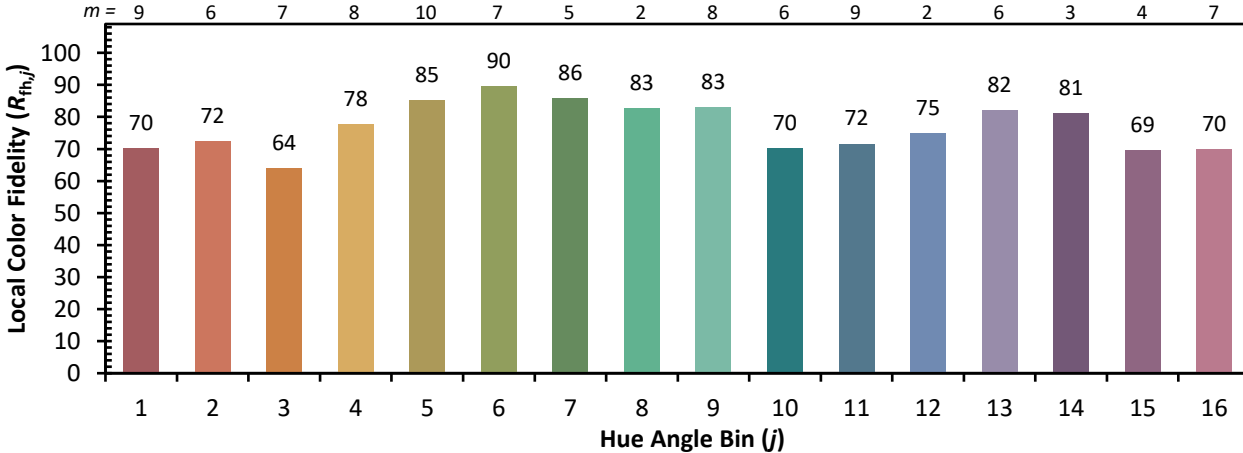
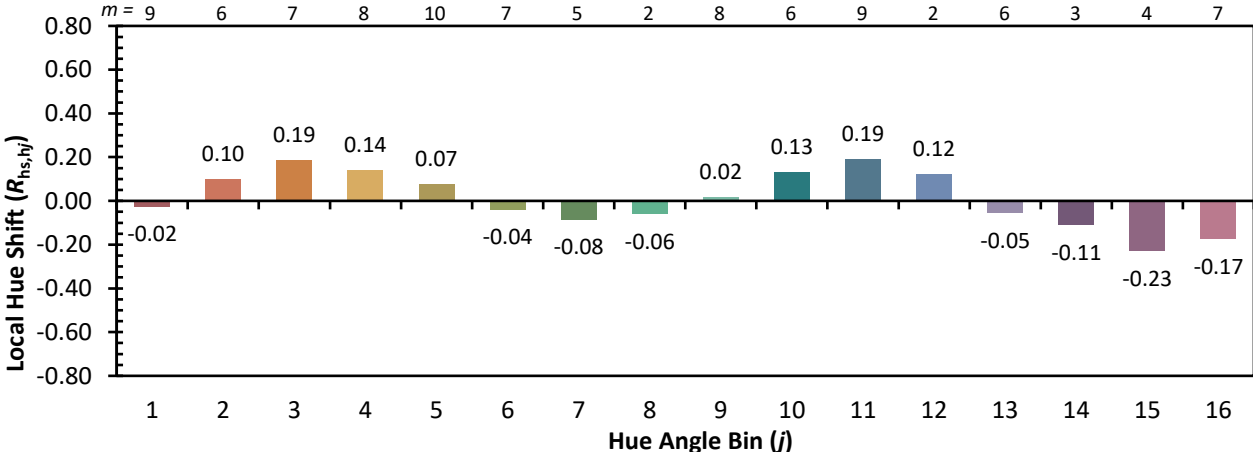
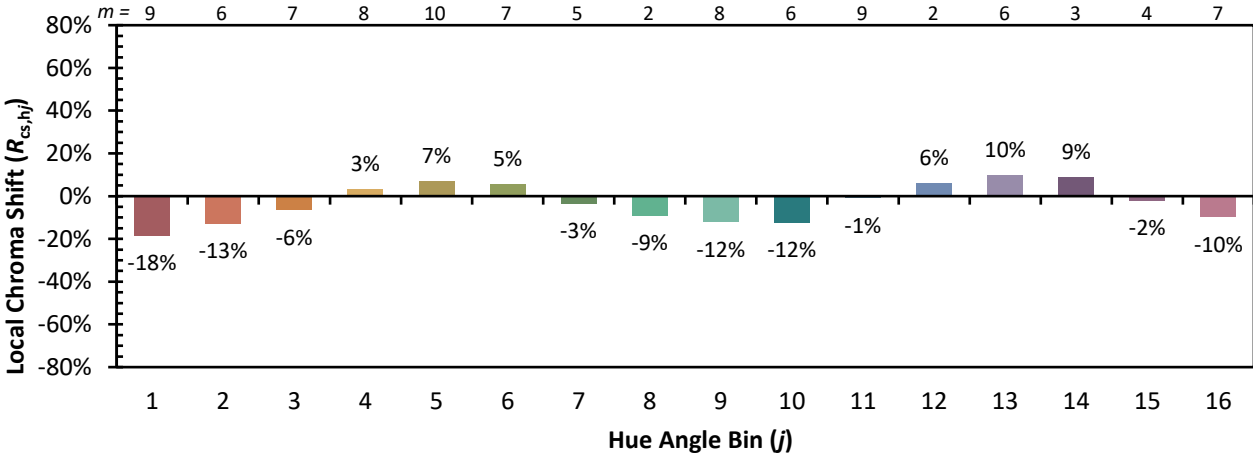


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

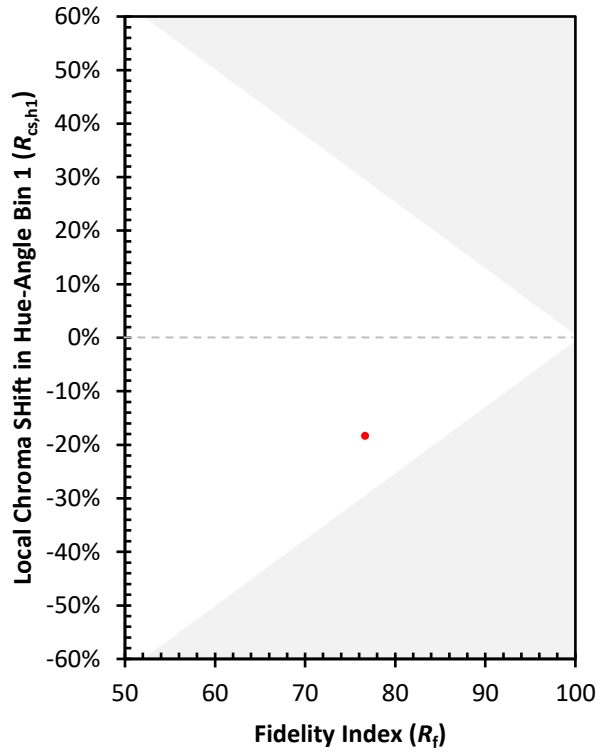
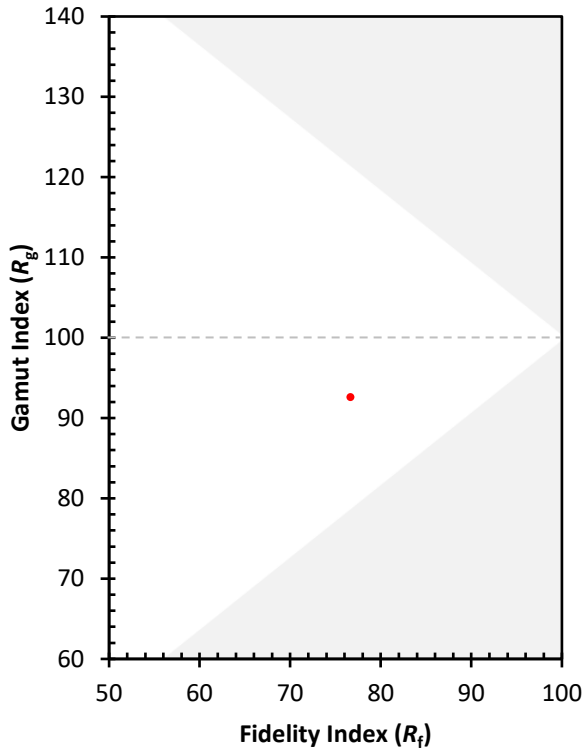
CES01 = 85	CES26 = 69	CES51 = 90	CES76 = 62
CES02 = 61	CES27 = 91	CES52 = 89	CES77 = 77
CES03 = 30	CES28 = 87	CES53 = 81	CES78 = 63
CES04 = 70	CES29 = 71	CES54 = 85	CES79 = 87
CES05 = 47	CES30 = 82	CES55 = 84	CES80 = 85
CES06 = 50	CES31 = 75	CES56 = 76	CES81 = 77
CES07 = 39	CES32 = 69	CES57 = 76	CES82 = 93
CES08 = 38	CES33 = 80	CES58 = 77	CES83 = 92
CES09 = 29	CES34 = 79	CES59 = 86	CES84 = 87
CES10 = 74	CES35 = 88	CES60 = 91	CES85 = 78
CES11 = 57	CES36 = 93	CES61 = 84	CES86 = 68
CES12 = 63	CES37 = 86	CES62 = 90	CES87 = 77
CES13 = 42	CES38 = 92	CES63 = 79	CES88 = 79
CES14 = 74	CES39 = 96	CES64 = 71	CES89 = 70
CES15 = 71	CES40 = 92	CES65 = 67	CES90 = 78
CES16 = 46	CES41 = 94	CES66 = 68	CES91 = 78
CES17 = 49	CES42 = 89	CES67 = 65	CES92 = 56
CES18 = 56	CES43 = 84	CES68 = 70	CES93 = 74
CES19 = 72	CES44 = 99	CES69 = 79	CES94 = 50
CES20 = 65	CES45 = 88	CES70 = 64	CES95 = 65
CES21 = 86	CES46 = 84	CES71 = 61	CES96 = 76
CES22 = 78	CES47 = 88	CES72 = 86	CES97 = 85
CES23 = 92	CES48 = 76	CES73 = 56	CES98 = 76
CES24 = 91	CES49 = 84	CES74 = 96	CES99 = 61
CES25 = 72	CES50 = 90	CES75 = 63	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)