

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: P980895

Luminaire Tested: **NFFLD-S-C70-7022-33**

Issue Date: 04/10/2025



Test Information

Test Method: LM-79-08
Report Number: P980895
Test Lab: INNOVATION CENTER(G2)
Issue Date: 04/10/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-S-C70-7022-33
Description: NIGHT FALCON SMALL SIZE 30W 70CRI 2200K LED FIXTURE NEMA 3
Light Source: (2) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

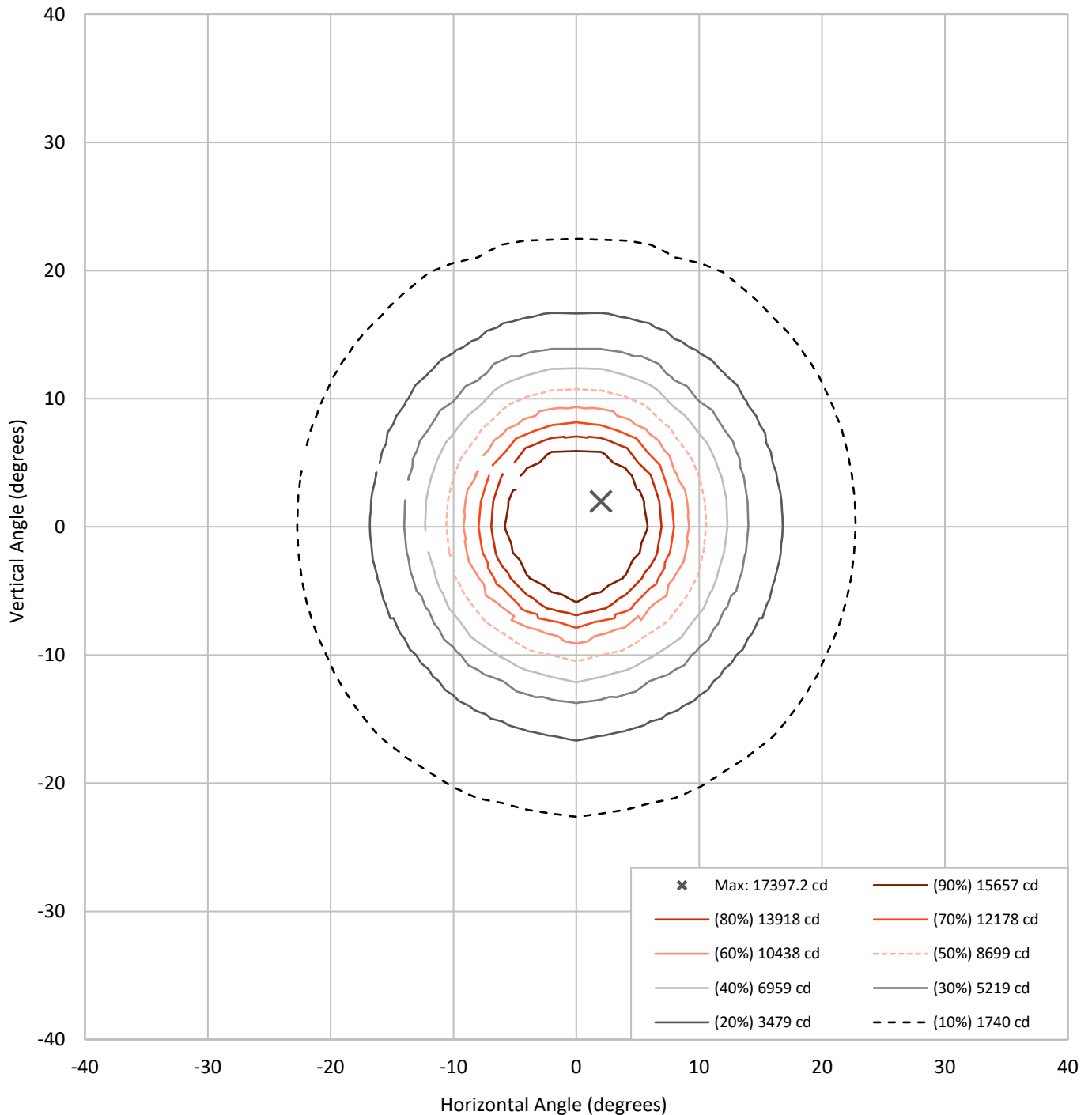
Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	3180.2 lumens	Max Intensity:	17397.2 candela
Efficiency:	N/A	Max Intensity Angle:	2°H x 2°V
Efficacy:	101.0 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:	1377.1 lumens	Field Lumens:	2805.2 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





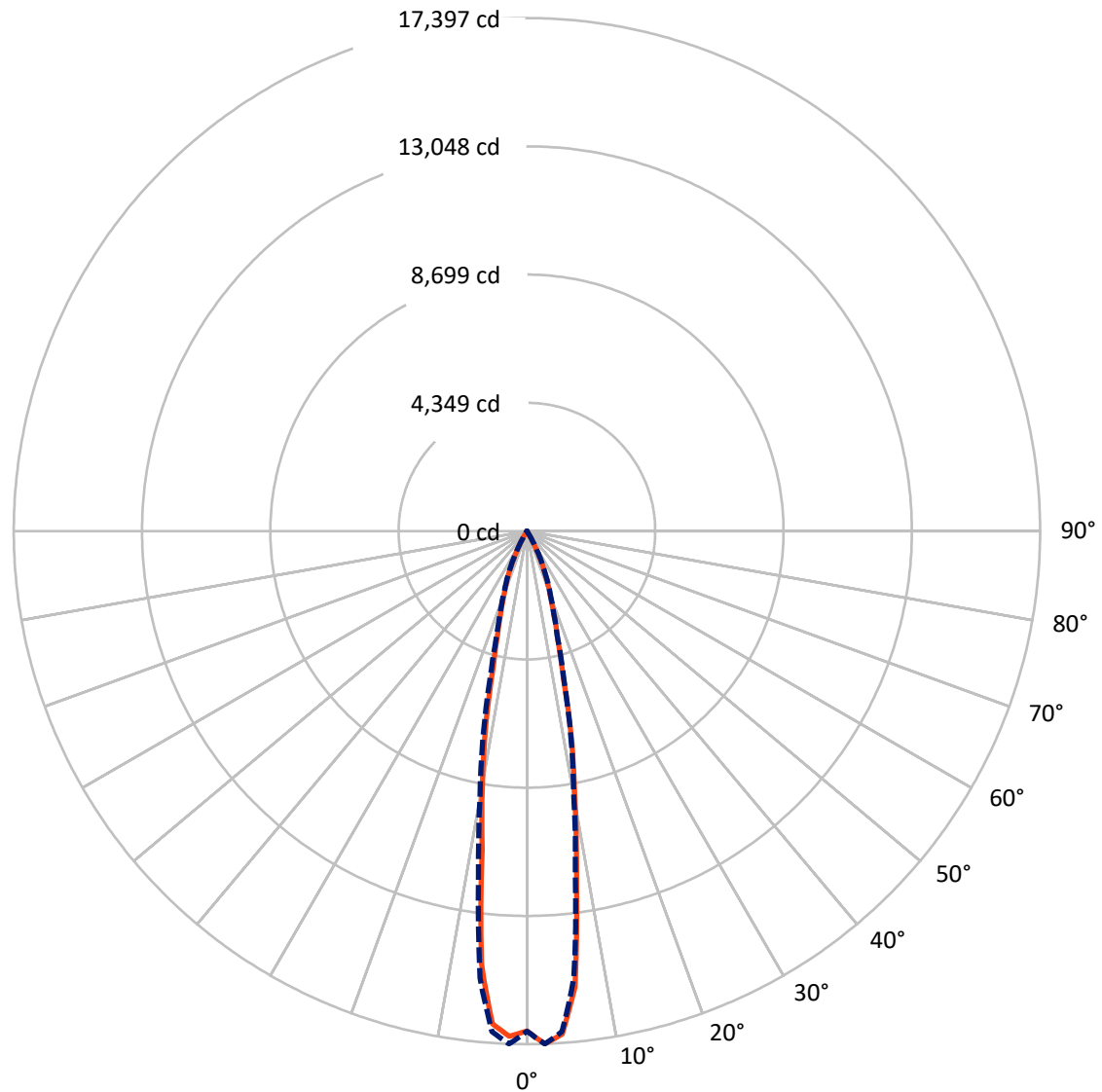
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Lumen Table

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	0.2	0.9	0.9	0.2	0.0	0.0	0.0	0.0					
20	0.0	0.0	0.0	0.0	0.0	1.8	16.6	33.6	33.6	16.6	1.8	0.0	0.0	0.0	0.0				
10		0.0	0.0	0.0	0.3	16.3	64.3	132.0	132.0	64.3	16.3	0.3	0.0	0.0					
0	0.0	0.0	0.0	0.0	1.4	32.6	128.8	383.0	383.0	128.8	32.6	1.4	0.0	0.0	0.0				
-10		0.0	0.0	0.0	1.4	32.0	124.3	368.9	368.9	124.3	32.0	1.4	0.0	0.0					
-20	0.0	0.0	0.0	0.0	0.3	15.1	61.6	123.9	123.9	61.6	15.1	0.3	0.0	0.0	0.0				
-30		0.0	0.0	0.0	0.0	1.4	15.5	32.8	32.8	15.5	1.4	0.0	0.0	0.0					
-40	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	0.9	0.1	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					
-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					
-80																			
-90	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				
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90

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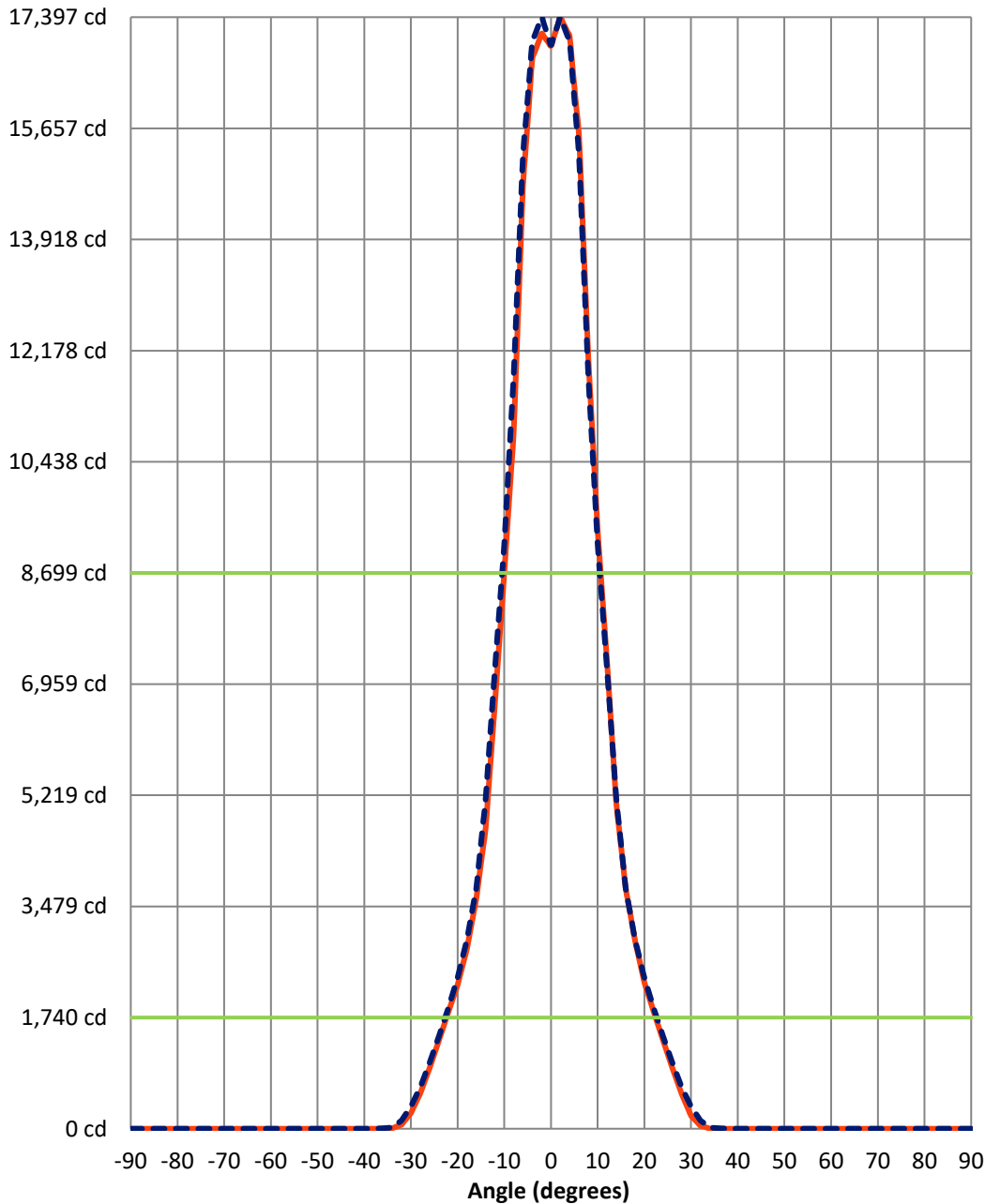
Luminous Intensity Polar Plot



— 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: 1377.1
 Efficiency: 43.3%

Field:
 H Angle: 45.3°
 V Angle: 44.8°
 Lumens: 2805.2
 Efficiency: 88.2%

Spill:
 Lumens: 375
 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°	1.6	3.3	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32°	41.8	48.4	45.9	58.2	37.7	39.4	19.7	2.5	0.0	0.0	0.0
30°	191.9	204.2	198.4	223.9	150.1	154.2	110.7	54.9	24.6	6.6	0.0
28°	533.0	543.7	519.9	514.2	392.0	379.7	308.3	187.8	108.2	54.1	13.9
26°	944.7	950.4	928.3	902.9	737.2	705.2	601.1	405.1	276.4	166.5	82.8
24°	1390.8	1385.9	1370.3	1321.1	1134.1	1077.5	954.5	712.6	526.5	356.7	223.9
22°	1849.2	1831.2	1817.2	1749.1	1549.1	1467.1	1331.7	1064.4	828.2	610.9	428.1
20°	2309.2	2291.2	2264.1	2185.4	1949.2	1855.8	1712.2	1436.7	1161.2	911.9	670.0
18°	2931.6	2948.0	2874.2	2732.4	2416.7	2253.5	2060.8	1784.4	1490.0	1212.0	931.6
16°	3750.9	3766.4	3603.3	3413.8	2980.9	2757.8	2458.5	2110.0	1791.8	1513.0	1205.5
14°	5100.7	5087.5	4772.6	4402.8	3724.6	3325.3	2941.5	2487.2	2084.5	1774.6	1449.8
12°	7392.7	7318.0	6796.5	6063.4	4766.9	4045.3	3492.6	2907.0	2392.1	2014.8	1667.1
10°	9470.7	9364.9	8863.0	8003.6	6385.7	5086.7	4148.6	3350.7	2733.2	2266.6	1857.4
8°	12409.7	12067.7	10965.6	9624.8	8118.4	6489.0	5049.0	3840.3	3055.5	2496.2	2034.5
6°	15598.0	15545.5	14253.1	11752.0	9444.4	7796.1	5996.1	4385.6	3351.5	2697.9	2179.7
4°	17161.8	17096.2	16233.5	14059.6	10666.3	8674.4	6759.6	4848.1	3597.5	2855.4	2285.5
2°	16961.7	17397.2	17013.4	15229.0	11779.1	9150.0	7199.1	5158.9	3762.3	2962.0	2364.2



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CANDELA DISTRIBUTION (continued):

	0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°
0°	16865.0	16947.0	17067.5	15500.4	12097.2	9280.4	7268.0	5221.2	3810.7	2991.5	2376.5
-2°	17294.7	17141.3	16732.1	14889.5	11546.2	9059.8	6980.2	5017.8	3729.5	2939.0	2331.4
-4°	17115.9	16749.3	15539.0	13136.2	10356.3	8525.1	6325.8	4618.5	3545.9	2822.6	2246.1
-6°	15539.0	14751.7	13070.6	10696.6	9150.8	7491.9	5468.0	4126.4	3282.6	2650.4	2120.6
-8°	11943.9	10886.9	10156.2	8961.4	7819.9	6111.8	4573.4	3634.4	2981.7	2442.9	1975.5
-10°	9209.1	8705.6	8246.3	7173.7	6091.3	4838.2	3814.0	3169.5	2661.9	2214.1	1804.1
-12°	7093.4	6663.7	6119.1	5245.8	4589.0	3889.5	3217.8	2752.1	2352.7	1985.3	1621.2
-14°	4966.2	4698.8	4425.8	3969.8	3626.2	3189.1	2718.4	2360.9	2065.7	1740.9	1395.7
-16°	3745.9	3600.0	3442.5	3155.5	2946.4	2635.6	2284.6	2031.2	1794.3	1483.5	1152.2
-18°	2947.2	2815.2	2720.1	2542.1	2401.1	2172.3	1936.1	1722.1	1492.5	1183.3	882.4
-20°	2320.7	2251.8	2171.5	2061.6	1982.0	1804.1	1580.2	1373.6	1162.0	876.6	622.4
-22°	1878.7	1822.1	1754.9	1648.3	1569.6	1403.9	1192.3	1034.9	842.2	593.7	392.8
-24°	1435.9	1381.8	1322.7	1220.2	1144.0	999.6	820.0	694.6	544.5	337.0	193.5
-26°	1002.9	948.8	901.2	805.3	742.1	624.1	488.7	396.1	282.9	143.5	65.6
-28°	603.6	552.7	520.7	437.1	392.8	310.0	231.3	170.6	108.2	42.6	8.2
-30°	277.2	245.2	225.5	170.6	150.1	103.3	69.7	48.4	24.6	4.1	0.0
-32°	80.4	64.8	54.9	40.2	36.9	19.7	7.4	2.5	0.8	0.0	0.0
-34°	12.3	7.4	2.5	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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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



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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°	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26°	37.7	6.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24°	118.1	35.3	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22°	259.1	105.0	45.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	442.0	234.5	111.5	11.5	6.6	0.0	0.0	0.0	0.0	0.0	0.0
18°	651.1	396.1	208.3	45.9	24.6	0.0	0.0	0.0	0.0	0.0	0.0
16°	875.8	573.2	332.9	114.8	59.9	0.0	0.0	0.0	0.0	0.0	0.0
14°	1085.7	753.6	468.2	213.2	103.3	10.7	0.0	0.0	0.0	0.0	0.0
12°	1293.2	930.7	604.4	315.7	155.8	27.9	0.0	0.0	0.0	0.0	0.0
10°	1476.1	1089.8	732.3	413.3	207.5	49.2	0.8	0.8	0.0	0.0	0.0
8°	1628.6	1223.5	841.4	498.6	256.7	76.3	5.7	2.5	0.0	0.0	0.0
6°	1750.0	1330.9	930.7	568.3	298.5	100.0	10.7	4.1	0.0	0.0	0.0
4°	1834.4	1406.4	996.4	620.0	330.5	118.9	14.8	6.6	0.0	0.0	0.0
2°	1886.1	1447.4	1032.4	648.7	348.5	130.4	18.0	7.4	0.0	0.0	0.0



REPORT NUMBER: P980895

CATALOG NUMBER: NFFLD-S-C70-7022-33

CANDELA DISTRIBUTION (continued):

	22°	24°	26°	28°	30°	32°	34°	36°	38°	40°	42°
0°	1900.0	1459.7	1042.3	656.0	354.3	134.5	18.9	8.2	0.0	0.0	0.0
-2°	1875.4	1440.0	1023.4	639.6	342.8	128.7	18.0	7.4	0.0	0.0	0.0
-4°	1816.4	1387.5	974.2	601.9	319.0	114.8	14.8	6.6	0.0	0.0	0.0
-6°	1724.5	1303.9	899.6	542.9	282.1	94.3	9.8	4.1	0.0	0.0	0.0
-8°	1599.9	1189.9	803.6	466.6	236.2	69.7	4.9	2.5	0.0	0.0	0.0
-10°	1440.8	1045.6	686.4	378.0	186.1	44.3	0.8	0.0	0.0	0.0	0.0
-12°	1254.7	878.3	553.5	279.6	135.3	24.6	0.0	0.0	0.0	0.0	0.0
-14°	1043.9	695.4	413.3	176.3	85.3	9.0	0.0	0.0	0.0	0.0	0.0
-16°	819.2	509.2	279.6	80.4	42.6	0.0	0.0	0.0	0.0	0.0	0.0
-18°	595.4	331.3	165.6	27.1	14.8	0.0	0.0	0.0	0.0	0.0	0.0
-20°	387.1	173.8	80.4	5.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0
-22°	215.7	59.9	27.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-24°	91.8	18.9	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-26°	27.1	2.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-28°	2.5	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: P980895

CATALOG NUMBER: NFFLD-S-C70-7022-33

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: P980895

CATALOG NUMBER: NFFLD-S-C70-7022-33

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: P980895

CATALOG NUMBER: NFFLD-S-C70-7022-33

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: P980895

CATALOG NUMBER: NFFLD-S-C70-7022-33

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: P980895

CATALOG NUMBER: NFFLD-S-C70-7022-33

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: P980895

CATALOG NUMBER: NFFLD-S-C70-7022-33

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: P980895

CATALOG NUMBER: NFFLD-S-C70-7022-33

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: P980895

CATALOG NUMBER: NFFLD-S-C70-7022-33

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: P980895

CATALOG NUMBER: NFFLD-S-C70-7022-33

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: P980895
CATALOG NUMBER: NFFLD-S-C70-7022-33

CANDELA DISTRIBUTION (continued):

	88°	90°
-90°	0.0	0.0

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



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

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2501-319-1

Test Date: 02/03/2025

Luminaire Tested: NFFLD-C25-7022-33

Data in this report applies to families of products including NFFLD-C25-7022-33

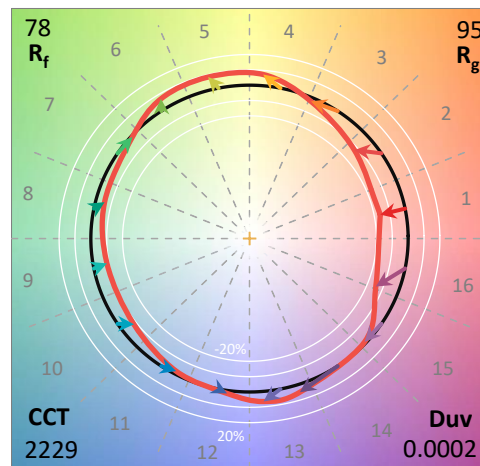
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2501-319-1
 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-C25-7022-33**
 Description: LUMARK NIGHT FALCON 10500LM NEMA 3

Spectral Parameters

CCT (K): 2229
 CIE u': 0.2881
 CIE v': 0.5359
 Duv: 0.0002
 CIE x: 0.5030
 CIE y: 0.4158
 CIE z: 0.0812
 Peak Wavelength (nm): 607
 Dominant Wavelength (nm): 586
 Purity: 75.81267
 Rf: 78.4
 Rg: 94.6

CRI (Ra):	73.1		
R1:	70.7	R9:	-28.2
R2:	88.3	R10:	77.0
R3:	89.2	R11:	67.4
R4:	68.4	R12:	75.8
R5:	71.2	R13:	74.3
R6:	88.6	R14:	94.4
R7:	71.8	R15:	60.0
R8:	36.7		



Test Conditions

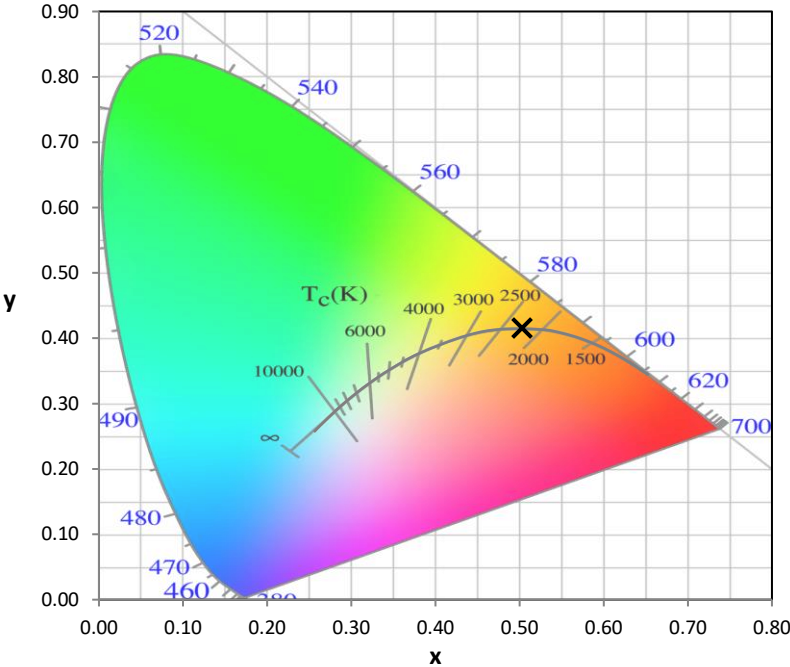
Stabilization Time: 45M
 Operation Time: 1H 45M
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2501-319-1

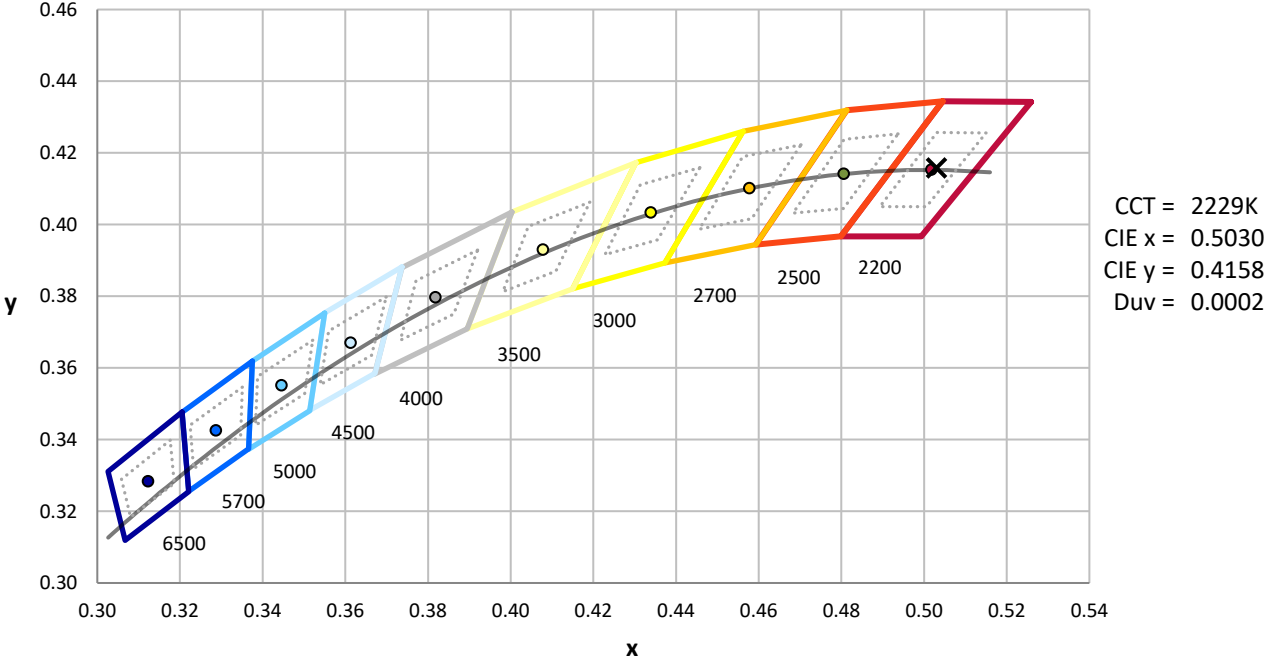
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	12/16/2024	6/16/2025
Power Meter	INXT2011004	1/21/2025	1/21/2026
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2501-319-1

CIE 1931 Chromaticity Diagram



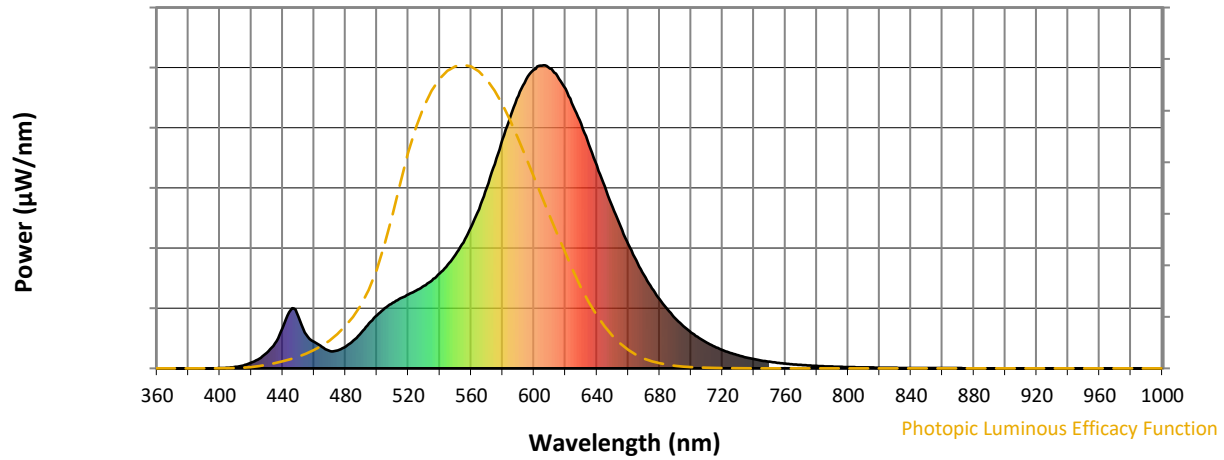
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 2200K 4-step quadrangle

REPORT NUMBER: SP1-2501-319-1

Photopic Flux vs. Wavelength

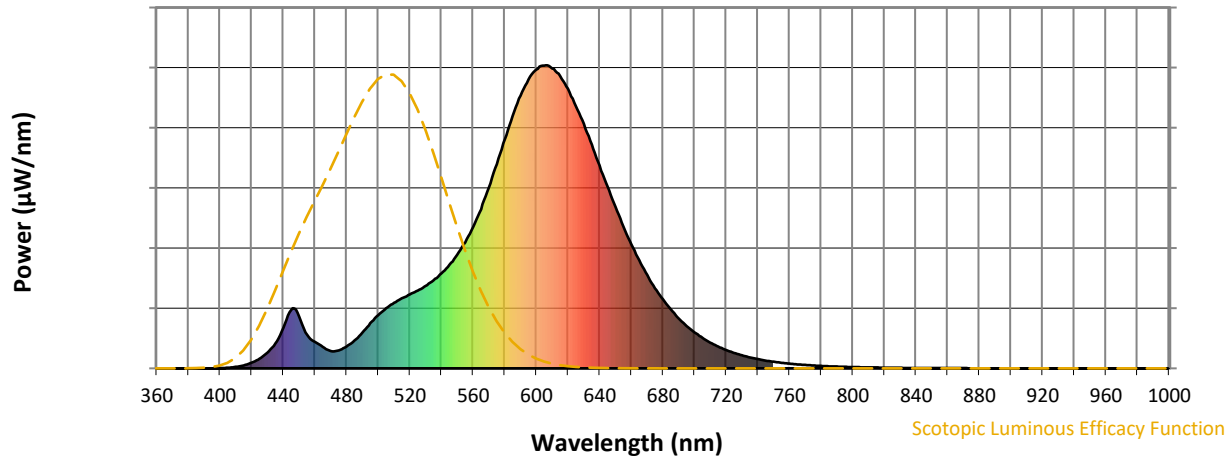


Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	118	NR	620	923	NR	750	22	NR	880	0	NR
365	0	NR	495	148	NR	625	865	NR	755	18	NR	885	0	NR
370	0	NR	500	175	NR	630	807	NR	760	16	NR	890	0	NR
375	0	NR	505	198	NR	635	739	NR	765	13	NR	895	0	NR
380	0	NR	510	216	NR	640	669	NR	770	11	NR	900	0	NR
385	0	NR	515	231	NR	645	600	NR	775	10	NR	905	0	NR
390	0	NR	520	244	NR	650	532	NR	780	8	NR	910	0	NR
395	0	NR	525	257	NR	655	469	NR	785	7	NR	915	0	NR
400	1	NR	530	273	NR	660	410	NR	790	6	NR	920	0	NR
405	2	NR	535	291	NR	665	357	NR	795	5	NR	925	0	NR
410	5	NR	540	314	NR	670	308	NR	800	4	NR	930	0	NR
415	10	NR	545	342	NR	675	264	NR	805	4	NR	935	0	NR
420	19	NR	550	375	NR	680	228	NR	810	3	NR	940	0	NR
425	32	NR	555	416	NR	685	194	NR	815	3	NR	945	0	NR
430	52	NR	560	467	NR	690	165	NR	820	2	NR	950	0	NR
435	82	NR	565	525	NR	695	140	NR	825	2	NR	955	0	NR
440	134	NR	570	597	NR	700	119	NR	830	2	NR	960	0	NR
445	192	NR	575	673	NR	705	101	NR	835	2	NR	965	0	NR
450	171	NR	580	756	NR	710	85	NR	840	1	NR	970	0	NR
455	111	NR	585	833	NR	715	72	NR	845	1	NR	975	0	NR
460	87	NR	590	900	NR	720	61	NR	850	1	NR	980	0	NR
465	71	NR	595	954	NR	725	51	NR	855	1	NR	985	0	NR
470	57	NR	600	987	NR	730	43	NR	860	1	NR	990	0	NR
475	59	NR	605	999	NR	735	36	NR	865	1	NR	995	0	NR
480	72	NR	610	989	NR	740	30	NR	870	1	NR	1000	0	NR
485	92	NR	615	965	NR	745	26	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



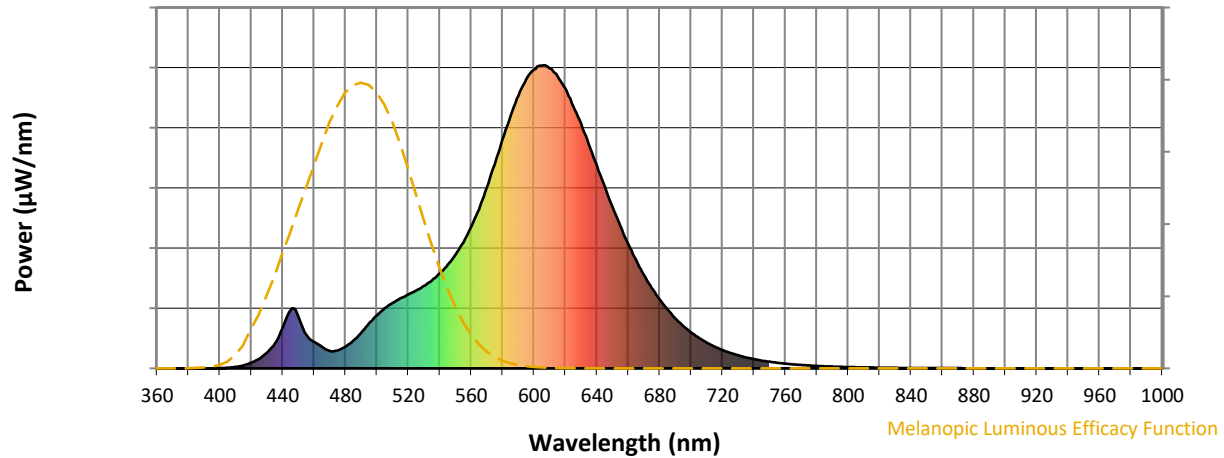
Scotopic Lumens: NR

S/P: 0.94

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	118	NR	620	923	NR	750	22	NR	880	0	NR
365	0	NR	495	148	NR	625	865	NR	755	18	NR	885	0	NR
370	0	NR	500	175	NR	630	807	NR	760	16	NR	890	0	NR
375	0	NR	505	198	NR	635	739	NR	765	13	NR	895	0	NR
380	0	NR	510	216	NR	640	669	NR	770	11	NR	900	0	NR
385	0	NR	515	231	NR	645	600	NR	775	10	NR	905	0	NR
390	0	NR	520	244	NR	650	532	NR	780	8	NR	910	0	NR
395	0	NR	525	257	NR	655	469	NR	785	7	NR	915	0	NR
400	1	NR	530	273	NR	660	410	NR	790	6	NR	920	0	NR
405	2	NR	535	291	NR	665	357	NR	795	5	NR	925	0	NR
410	5	NR	540	314	NR	670	308	NR	800	4	NR	930	0	NR
415	10	NR	545	342	NR	675	264	NR	805	4	NR	935	0	NR
420	19	NR	550	375	NR	680	228	NR	810	3	NR	940	0	NR
425	32	NR	555	416	NR	685	194	NR	815	3	NR	945	0	NR
430	52	NR	560	467	NR	690	165	NR	820	2	NR	950	0	NR
435	82	NR	565	525	NR	695	140	NR	825	2	NR	955	0	NR
440	134	NR	570	597	NR	700	119	NR	830	2	NR	960	0	NR
445	192	NR	575	673	NR	705	101	NR	835	2	NR	965	0	NR
450	171	NR	580	756	NR	710	85	NR	840	1	NR	970	0	NR
455	111	NR	585	833	NR	715	72	NR	845	1	NR	975	0	NR
460	87	NR	590	900	NR	720	61	NR	850	1	NR	980	0	NR
465	71	NR	595	954	NR	725	51	NR	855	1	NR	985	0	NR
470	57	NR	600	987	NR	730	43	NR	860	1	NR	990	0	NR
475	59	NR	605	999	NR	735	36	NR	865	1	NR	995	0	NR
480	72	NR	610	989	NR	740	30	NR	870	1	NR	1000	0	NR
485	92	NR	615	965	NR	745	26	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



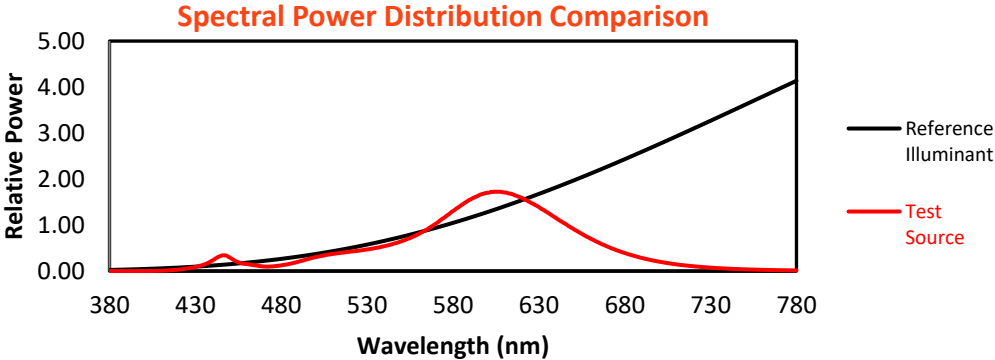
Melanopic Lumens: NR

M/P: 1.61

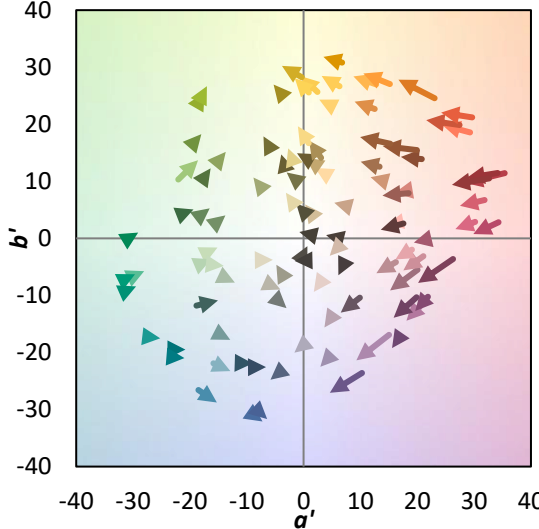
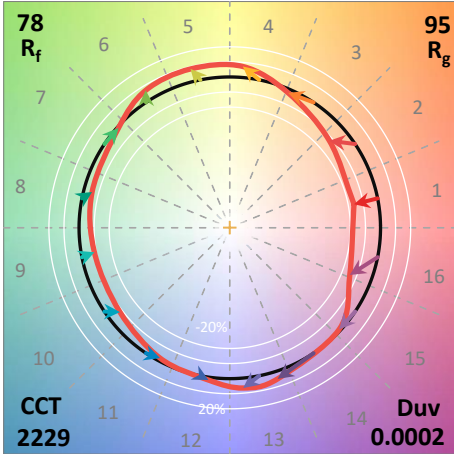
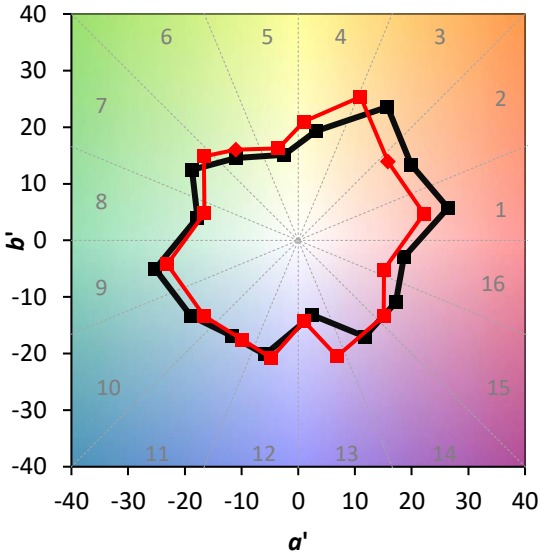
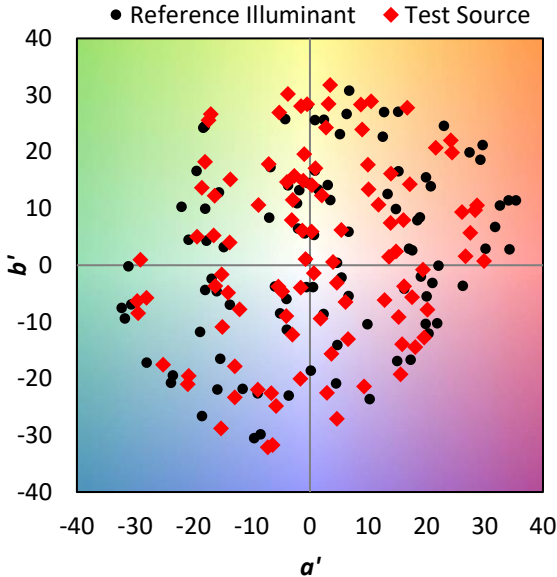
λ (nm)	Power W ² /nm	Lumens (φ/nm)	λ (nm)	Power W ² /nm	Lumens (φ/nm)	λ (nm)	Power W ² /nm	Lumens (φ/nm)	λ (nm)	Power W ² /nm	Lumens (φ/nm)	λ (nm)	Power W ² /nm	Lumens (φ/nm)
360	0	NR	490	118	NR	620	923	NR	750	22	NR	880	0	NR
365	0	NR	495	148	NR	625	865	NR	755	18	NR	885	0	NR
370	0	NR	500	175	NR	630	807	NR	760	16	NR	890	0	NR
375	0	NR	505	198	NR	635	739	NR	765	13	NR	895	0	NR
380	0	NR	510	216	NR	640	669	NR	770	11	NR	900	0	NR
385	0	NR	515	231	NR	645	600	NR	775	10	NR	905	0	NR
390	0	NR	520	244	NR	650	532	NR	780	8	NR	910	0	NR
395	0	NR	525	257	NR	655	469	NR	785	7	NR	915	0	NR
400	1	NR	530	273	NR	660	410	NR	790	6	NR	920	0	NR
405	2	NR	535	291	NR	665	357	NR	795	5	NR	925	0	NR
410	5	NR	540	314	NR	670	308	NR	800	4	NR	930	0	NR
415	10	NR	545	342	NR	675	264	NR	805	4	NR	935	0	NR
420	19	NR	550	375	NR	680	228	NR	810	3	NR	940	0	NR
425	32	NR	555	416	NR	685	194	NR	815	3	NR	945	0	NR
430	52	NR	560	467	NR	690	165	NR	820	2	NR	950	0	NR
435	82	NR	565	525	NR	695	140	NR	825	2	NR	955	0	NR
440	134	NR	570	597	NR	700	119	NR	830	2	NR	960	0	NR
445	192	NR	575	673	NR	705	101	NR	835	2	NR	965	0	NR
450	171	NR	580	756	NR	710	85	NR	840	1	NR	970	0	NR
455	111	NR	585	833	NR	715	72	NR	845	1	NR	975	0	NR
460	87	NR	590	900	NR	720	61	NR	850	1	NR	980	0	NR
465	71	NR	595	954	NR	725	51	NR	855	1	NR	985	0	NR
470	57	NR	600	987	NR	730	43	NR	860	1	NR	990	0	NR
475	59	NR	605	999	NR	735	36	NR	865	1	NR	995	0	NR
480	72	NR	610	989	NR	740	30	NR	870	1	NR	1000	0	NR
485	92	NR	615	965	NR	745	26	NR	875	1	NR			

Summary

$R_f = 78.4$
 $R_g = 94.6$
 CIE $R_a = 73.1$
 $R_9 = -28.2$

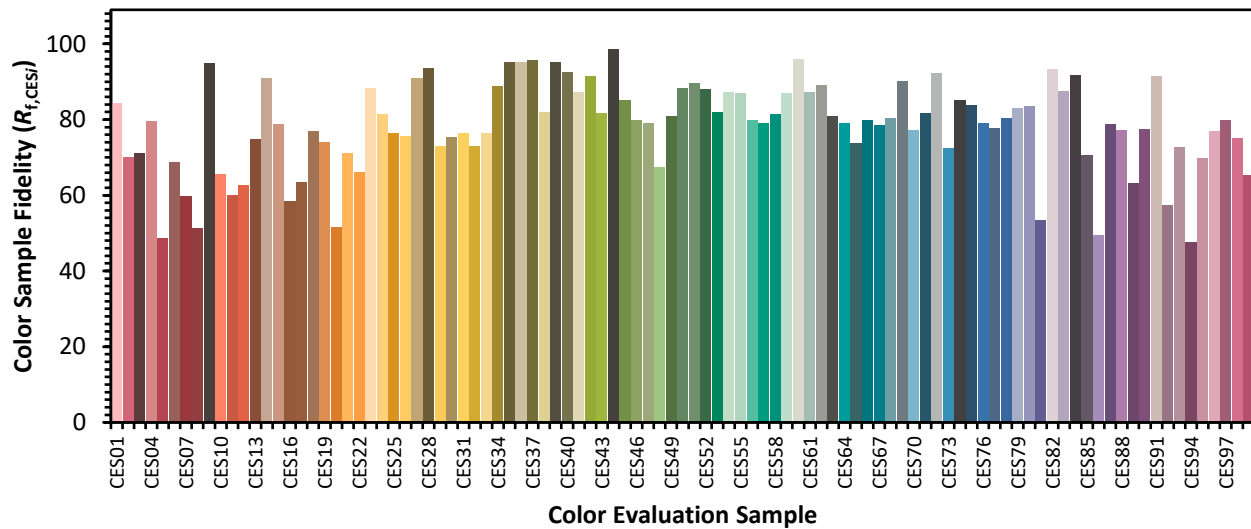


Color Vector Graphics

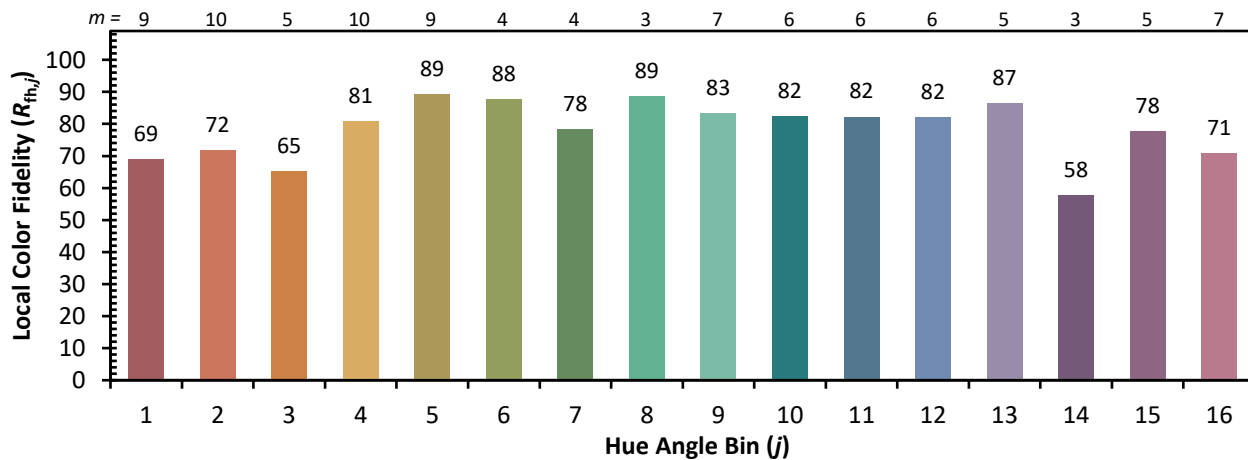
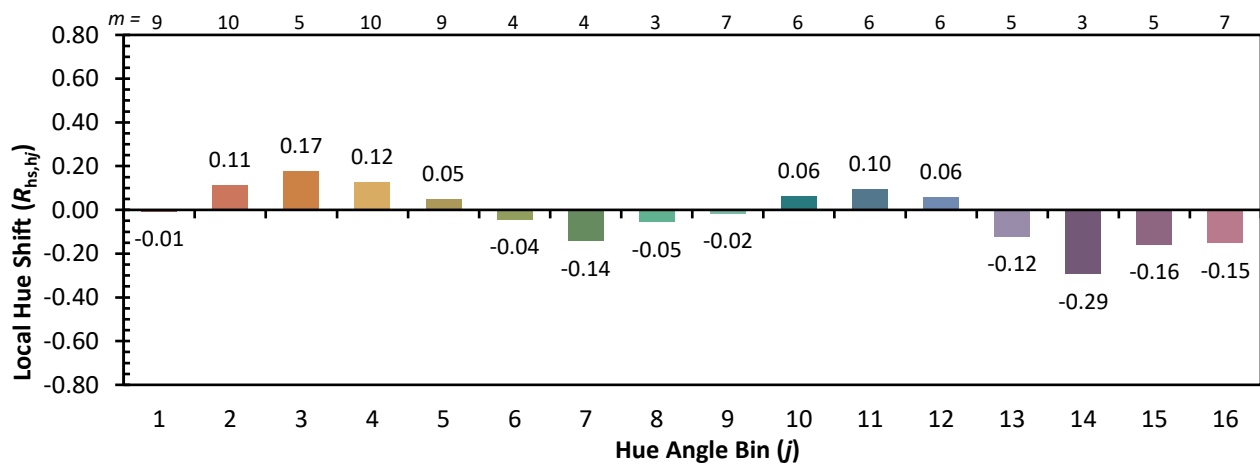
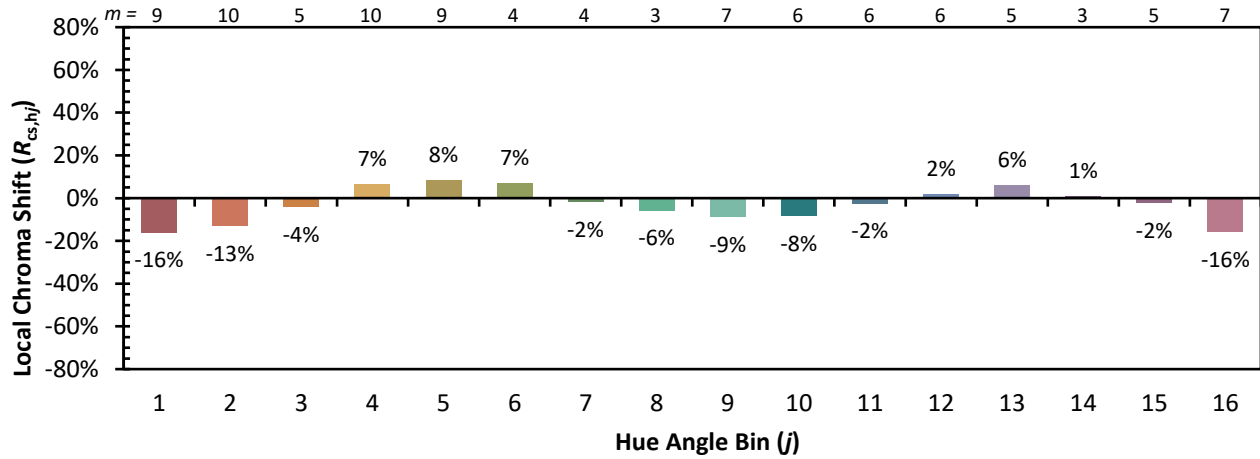


Individual Sample Fidelity Index ($R_{f,i}$)

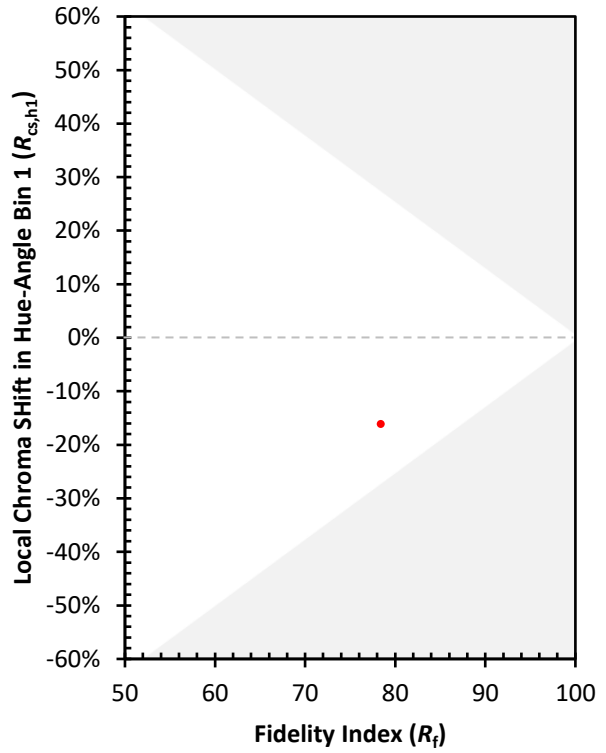
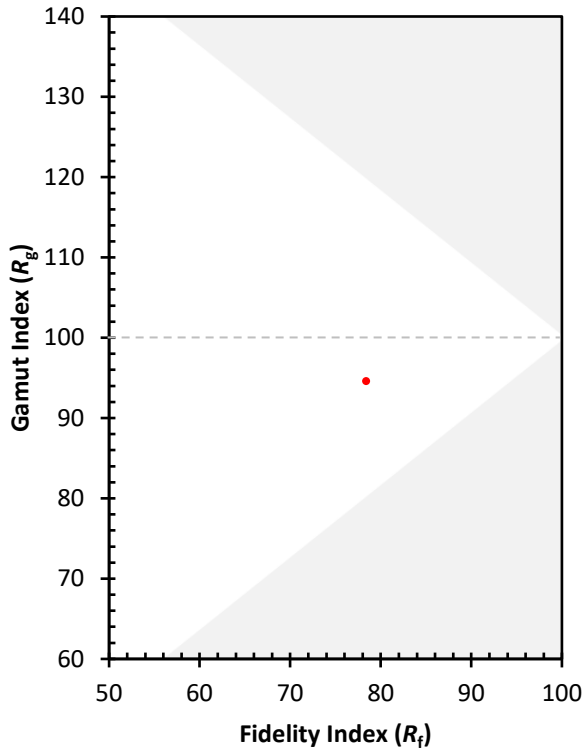
CES01 = 87	CES26 = 76	CES51 = 90	CES76 = 79
CES02 = 65	CES27 = 91	CES52 = 88	CES77 = 78
CES03 = 32	CES28 = 94	CES53 = 82	CES78 = 80
CES04 = 72	CES29 = 73	CES54 = 87	CES79 = 83
CES05 = 52	CES30 = 75	CES55 = 87	CES80 = 84
CES06 = 52	CES31 = 76	CES56 = 80	CES81 = 53
CES07 = 44	CES32 = 73	CES57 = 79	CES82 = 93
CES08 = 42	CES33 = 77	CES58 = 81	CES83 = 88
CES09 = 29	CES34 = 89	CES59 = 87	CES84 = 92
CES10 = 79	CES35 = 95	CES60 = 96	CES85 = 71
CES11 = 62	CES36 = 95	CES61 = 87	CES86 = 50
CES12 = 68	CES37 = 96	CES62 = 89	CES87 = 79
CES13 = 45	CES38 = 82	CES63 = 81	CES88 = 77
CES14 = 75	CES39 = 95	CES64 = 79	CES89 = 63
CES15 = 72	CES40 = 92	CES65 = 74	CES90 = 77
CES16 = 49	CES41 = 87	CES66 = 80	CES91 = 91
CES17 = 51	CES42 = 92	CES67 = 79	CES92 = 57
CES18 = 57	CES43 = 82	CES68 = 80	CES93 = 73
CES19 = 74	CES44 = 99	CES69 = 90	CES94 = 48
CES20 = 68	CES45 = 85	CES70 = 77	CES95 = 70
CES21 = 88	CES46 = 80	CES71 = 82	CES96 = 77
CES22 = 81	CES47 = 79	CES72 = 92	CES97 = 80
CES23 = 92	CES48 = 67	CES73 = 73	CES98 = 75
CES24 = 92	CES49 = 81	CES74 = 85	CES99 = 65
CES25 = 73	CES50 = 88	CES75 = 84	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)