

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: P980914

Luminaire Tested: **NFFLD-S-C15-7040-33**

Issue Date: 04/10/2025



Test Information

Test Method: LM-79-08
Report Number: P980914
Test Lab: INNOVATION CENTER(G2)
Issue Date: 04/10/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-S-C15-7040-33
Description: NIGHT FALCON SMALL SIZE 50W 70CRI 4000K LED FIXTURE NEMA 3
Light Source: (2) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

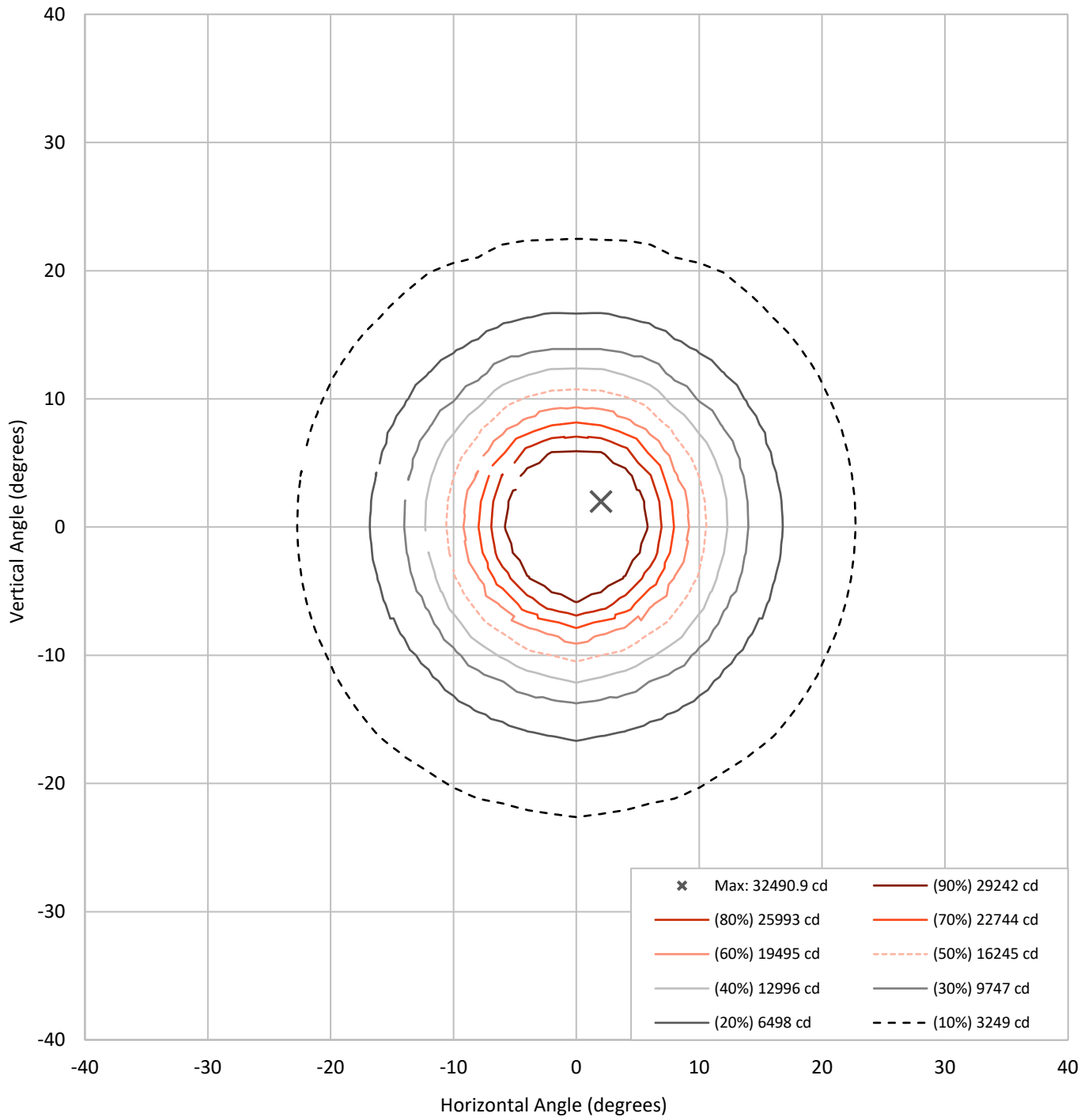
Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	5939.3 lumens	Max Intensity:	32490.9 candela
Efficiency:	N/A	Max Intensity Angle:	2°H x 2°V
Efficacy:	109.6 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:	2571.8 lumens	Field Lumens:	5238.9 lumens
Beam Efficiency:	43.3%	Field Efficiency:	88.2%

Input Watts (W): 54.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.90%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Iso-Candela Plot





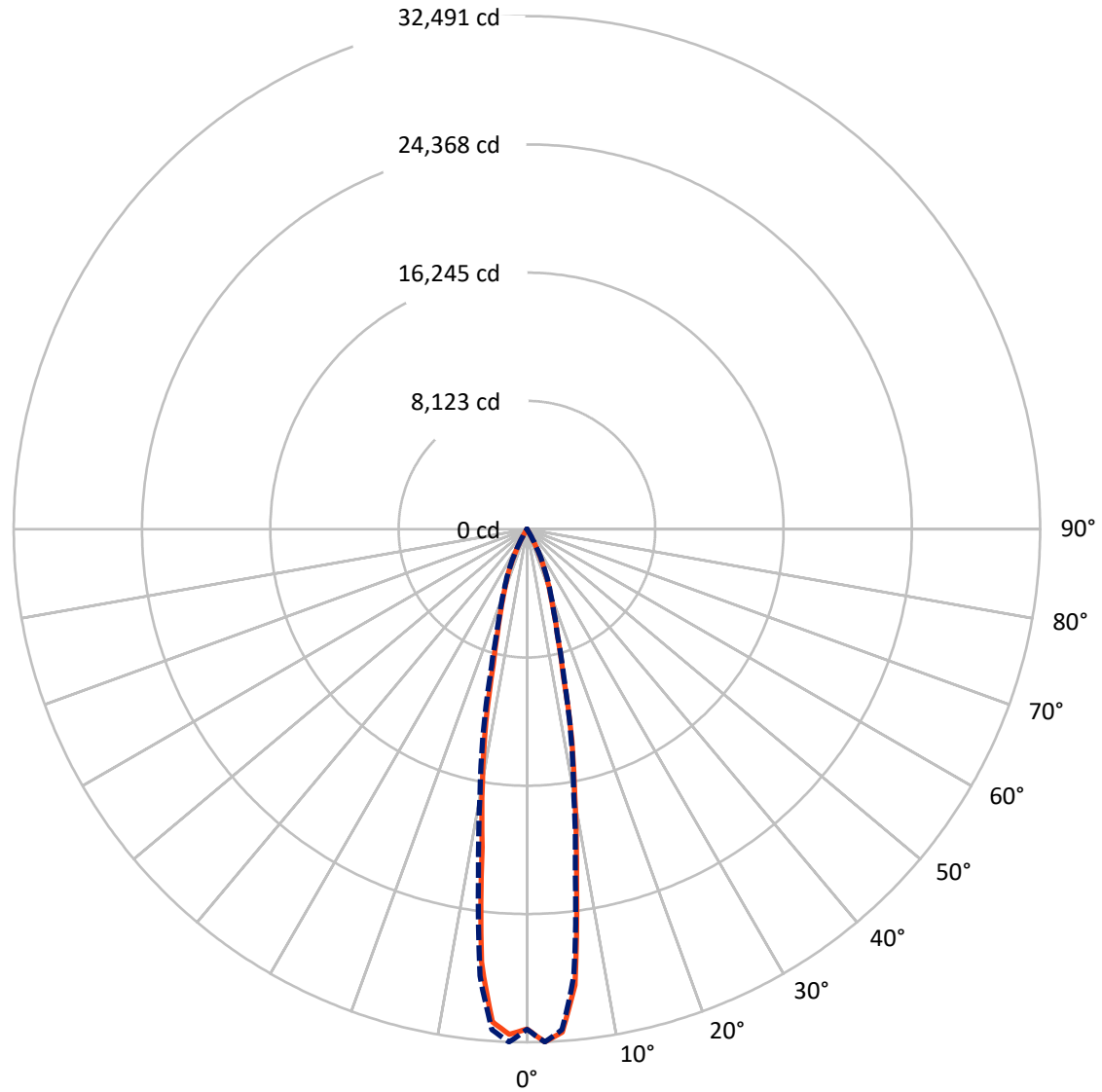
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Lumen Table

90	0.0															
80	0.0															
70	0.0															
60	0.0															
50	0.0															
40	0.0															
30	0.0															
20	0.0															
10	0.0															
0	0.0															
-10	0.0															
-20	0.0															
-30	0.0															
-40	0.0															
-50	0.0															
-60	0.0															
-70	0.0															
-80	0.0															
-90	0.0															

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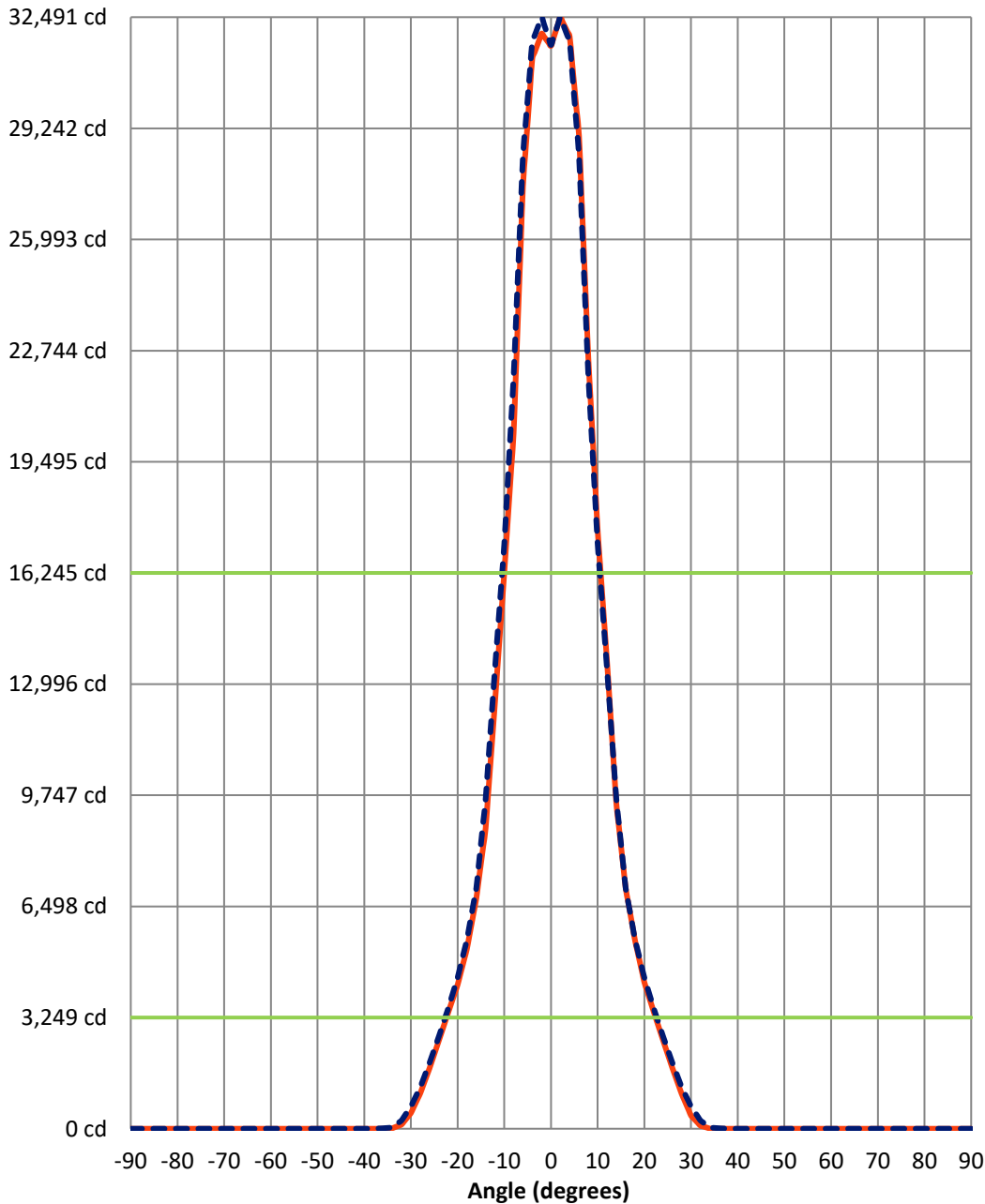
Luminous Intensity Polar Plot



— 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: 2571.8
 Efficiency: 43.3%

Field:
 H Angle: 45.3°
 V Angle: 44.8°
 Lumens: 5238.9
 Efficiency: 88.2%

Spill:
 Lumens: 700.3
 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°	3.1	6.1	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32°	78.1	90.4	85.8	108.7	70.4	73.5	36.8	4.6	0.0	0.0	0.0
30°	358.4	381.3	370.6	418.1	280.3	287.9	206.8	102.6	45.9	12.3	0.0
28°	995.5	1015.4	971.0	960.3	732.1	709.1	575.8	350.7	202.2	101.1	26.0
26°	1764.3	1775.0	1733.7	1686.2	1376.8	1317.1	1122.6	756.6	516.1	310.9	154.7
24°	2597.4	2588.2	2559.2	2467.3	2118.1	2012.4	1782.7	1330.9	983.2	666.2	418.1
22°	3453.6	3419.9	3393.8	3266.7	2893.0	2739.9	2487.2	1987.9	1546.8	1141.0	799.4
20°	4312.7	4279.0	4228.5	4081.5	3640.4	3465.8	3197.8	2683.2	2168.6	1703.0	1251.2
18°	5475.1	5505.8	5367.9	5103.0	4513.4	4208.6	3848.7	3332.6	2782.8	2263.6	1739.8
16°	7005.1	7034.2	6729.4	6375.7	5567.0	5150.5	4591.5	3940.6	3346.3	2825.6	2251.3
14°	9526.0	9501.5	8913.4	8222.7	6956.1	6210.3	5493.5	4645.1	3893.1	3314.2	2707.7
12°	13806.5	13667.2	12693.1	11324.0	8902.7	7554.9	6522.7	5429.2	4467.4	3762.9	3113.6
10°	17687.4	17489.8	16552.5	14947.5	11925.9	9499.9	7747.9	6257.7	5104.5	4233.1	3468.9
8°	23176.3	22537.7	20479.3	17975.3	15161.9	12118.8	9429.5	7172.1	5706.4	4661.9	3799.7
6°	29130.8	29032.8	26619.1	21948.0	17638.4	14560.0	11198.4	8190.5	6259.3	5038.7	4070.7
4°	32051.4	31928.9	30317.7	26257.7	19920.3	16200.3	12624.2	9054.3	6718.7	5332.7	4268.3
2°	31677.7	32490.9	31774.2	28441.6	21998.6	17088.6	13445.1	9634.7	7026.6	5531.8	4415.3



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CANDELA DISTRIBUTION (continued):

	0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°
0°	31497.0	31650.1	31875.3	28948.6	22592.8	17332.1	13573.8	9751.1	7116.9	5586.9	4438.3
-2°	32299.5	32013.1	31248.9	27807.6	21563.6	16920.1	13036.2	9371.3	6965.3	5488.9	4354.1
-4°	31965.6	31281.1	29020.6	24533.2	19341.4	15921.6	11814.1	8625.5	6622.2	5271.5	4194.8
-6°	29020.6	27550.3	24410.7	19977.0	17090.1	13991.9	10212.1	7706.5	6130.6	4949.8	3960.5
-8°	22306.4	20332.3	18967.7	16736.3	14604.5	11414.3	8541.2	6787.6	5568.6	4562.4	3689.4
-10°	17198.8	16258.5	15400.8	13397.6	11376.0	9035.9	7123.0	5919.3	4971.3	4135.1	3369.3
-12°	13247.5	12445.0	11428.1	9797.1	8570.3	7263.9	6009.6	5139.7	4393.9	3707.8	3027.8
-14°	9274.8	8775.5	8265.6	7414.0	6772.3	5956.0	5076.9	4409.2	3857.9	3251.4	2606.6
-16°	6995.9	6723.3	6429.3	5893.2	5502.7	4922.3	4266.8	3793.5	3350.9	2770.5	2151.8
-18°	5504.2	5257.7	5080.0	4747.7	4484.3	4057.0	3615.9	3216.2	2787.3	2210.0	1647.9
-20°	4334.2	4205.5	4055.4	3850.2	3701.7	3369.3	2951.2	2565.3	2170.1	1637.2	1162.4
-22°	3508.7	3403.0	3277.4	3078.3	2931.3	2621.9	2226.8	1932.8	1572.9	1108.8	733.6
-24°	2681.7	2580.6	2470.3	2278.9	2136.5	1866.9	1531.5	1297.2	1016.9	629.4	361.4
-26°	1873.0	1772.0	1683.1	1503.9	1386.0	1165.5	912.8	739.7	528.4	268.0	122.5
-28°	1127.2	1032.2	972.5	816.3	733.6	578.9	431.9	318.6	202.2	79.6	15.3
-30°	517.6	457.9	421.2	318.6	280.3	193.0	130.2	90.4	45.9	7.7	0.0
-32°	150.1	121.0	102.6	75.0	68.9	36.8	13.8	4.6	1.5	0.0	0.0
-34°	23.0	13.8	4.6	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°	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26°	70.4	12.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24°	220.5	65.9	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22°	484.0	196.0	85.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	825.5	438.0	208.3	21.4	12.3	0.0	0.0	0.0	0.0	0.0	0.0
18°	1216.0	739.7	389.0	85.8	45.9	0.0	0.0	0.0	0.0	0.0	0.0
16°	1635.7	1070.5	621.8	214.4	111.8	0.0	0.0	0.0	0.0	0.0	0.0
14°	2027.7	1407.5	874.5	398.2	193.0	19.9	0.0	0.0	0.0	0.0	0.0
12°	2415.2	1738.3	1128.7	589.6	291.0	52.1	0.0	0.0	0.0	0.0	0.0
10°	2756.7	2035.4	1367.6	771.9	387.5	91.9	1.5	1.5	0.0	0.0	0.0
8°	3041.6	2285.0	1571.3	931.2	479.4	142.4	10.7	4.6	0.0	0.0	0.0
6°	3268.2	2485.6	1738.3	1061.3	557.5	186.8	19.9	7.7	0.0	0.0	0.0
4°	3426.0	2626.5	1860.8	1157.8	617.2	222.1	27.6	12.3	0.0	0.0	0.0
2°	3522.5	2703.1	1928.2	1211.4	650.9	243.5	33.7	13.8	0.0	0.0	0.0



REPORT NUMBER: P980914

CATALOG NUMBER: NFFLD-S-C15-7040-33

CANDELA DISTRIBUTION (continued):

	22°	24°	26°	28°	30°	32°	34°	36°	38°	40°	42°
0°	3548.5	2726.1	1946.5	1225.2	661.6	251.2	35.2	15.3	0.0	0.0	0.0
-2°	3502.6	2689.3	1911.3	1194.6	640.2	240.4	33.7	13.8	0.0	0.0	0.0
-4°	3392.3	2591.3	1819.4	1124.1	595.8	214.4	27.6	12.3	0.0	0.0	0.0
-6°	3220.8	2435.1	1680.1	1013.9	526.8	176.1	18.4	7.7	0.0	0.0	0.0
-8°	2988.0	2222.2	1500.9	871.4	441.1	130.2	9.2	4.6	0.0	0.0	0.0
-10°	2690.9	1952.7	1281.9	706.0	347.7	82.7	1.5	0.0	0.0	0.0	0.0
-12°	2343.2	1640.2	1033.8	522.2	252.7	45.9	0.0	0.0	0.0	0.0	0.0
-14°	1949.6	1298.7	771.9	329.3	159.3	16.8	0.0	0.0	0.0	0.0	0.0
-16°	1530.0	951.1	522.2	150.1	79.6	0.0	0.0	0.0	0.0	0.0	0.0
-18°	1111.9	618.7	309.4	50.5	27.6	0.0	0.0	0.0	0.0	0.0	0.0
-20°	722.9	324.7	150.1	10.7	6.1	0.0	0.0	0.0	0.0	0.0	0.0
-22°	402.8	111.8	52.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-24°	171.5	35.2	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-26°	50.5	4.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-28°	4.6	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: P980914

CATALOG NUMBER: NFFLD-S-C15-7040-33

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: P980914

CATALOG NUMBER: NFFLD-S-C15-7040-33

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: P980914

CATALOG NUMBER: NFFLD-S-C15-7040-33

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: P980914

CATALOG NUMBER: NFFLD-S-C15-7040-33

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: P980914

CATALOG NUMBER: NFFLD-S-C15-7040-33

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: P980914

CATALOG NUMBER: NFFLD-S-C15-7040-33

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: P980914

CATALOG NUMBER: NFFLD-S-C15-7040-33

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: P980914

CATALOG NUMBER: NFFLD-S-C15-7040-33

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: P980914

CATALOG NUMBER: NFFLD-S-C15-7040-33

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: P980914
CATALOG NUMBER: NFFLD-S-C15-7040-33

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

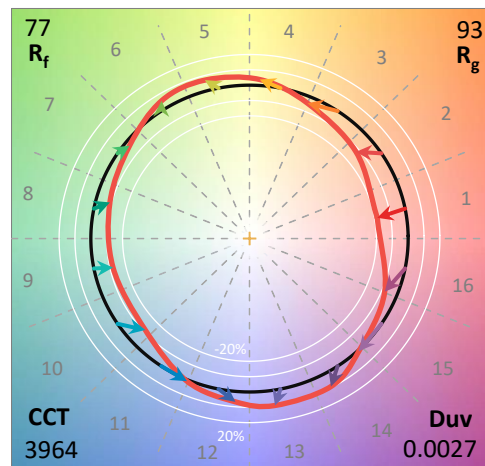
Test Information

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

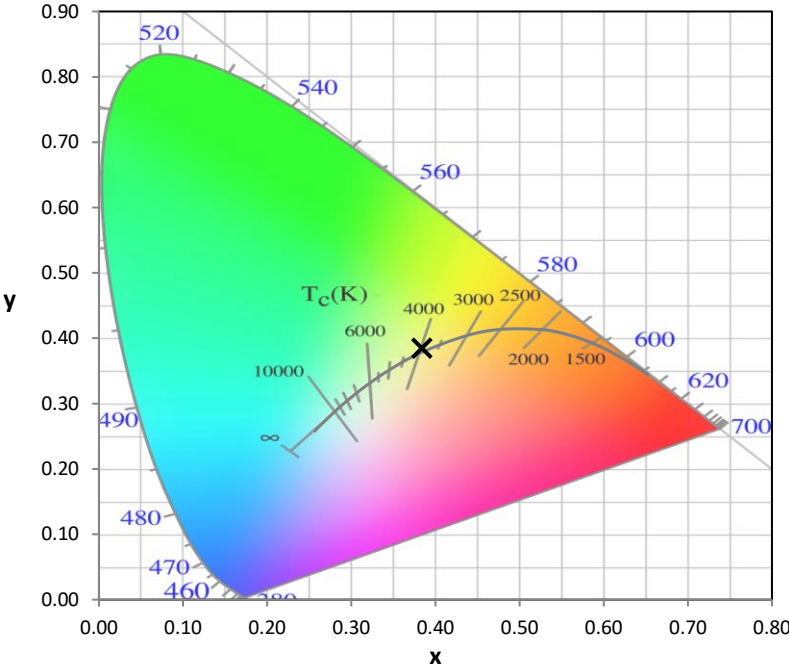
Stabilization Time: 42M
 Operation Time: 1H 42M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2501-319-6

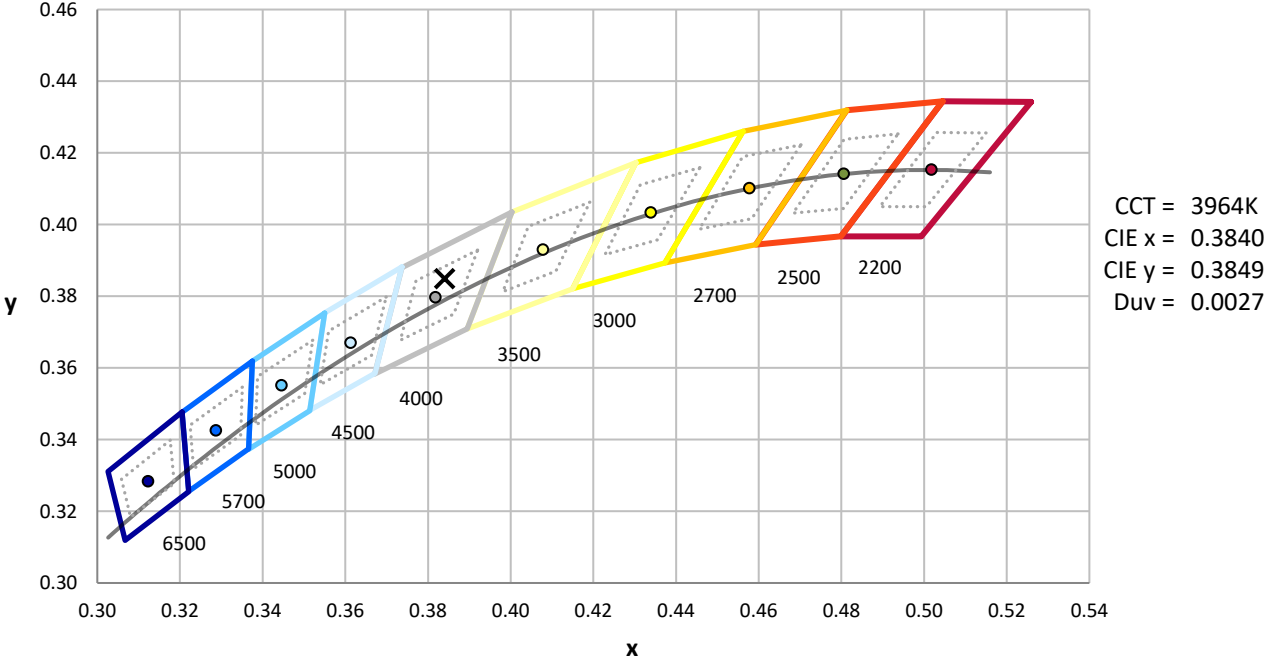
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	12/16/2024	6/16/2025
Power Meter	INXT2011004	1/21/2025	1/21/2026
AC Power Source	IN0063	10/22/2024	10/22/2025
DC Power Source	IN0208	10/22/2024	10/22/2025
Sphere Thermometer	IN0085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



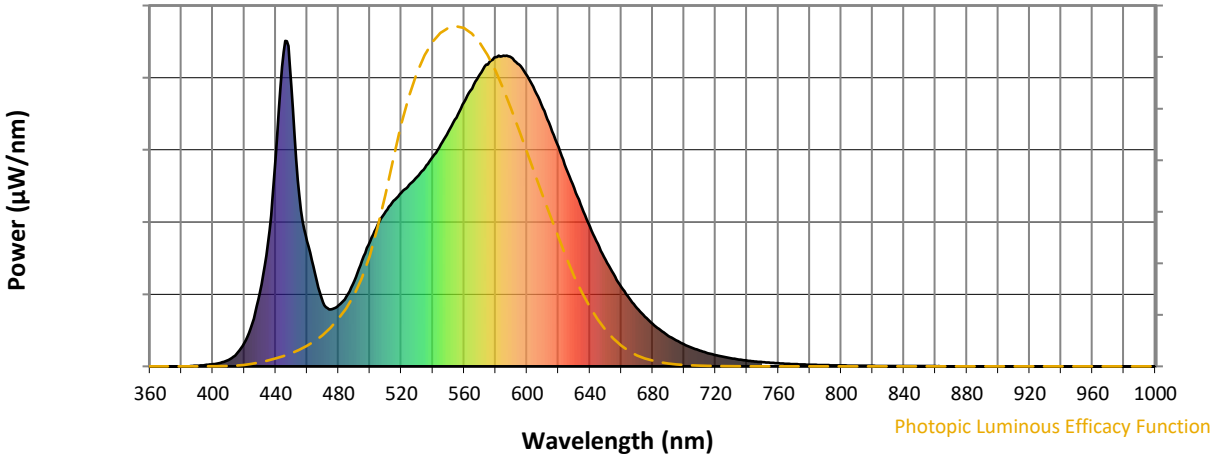
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2501-319-6

Photopic Flux vs. Wavelength

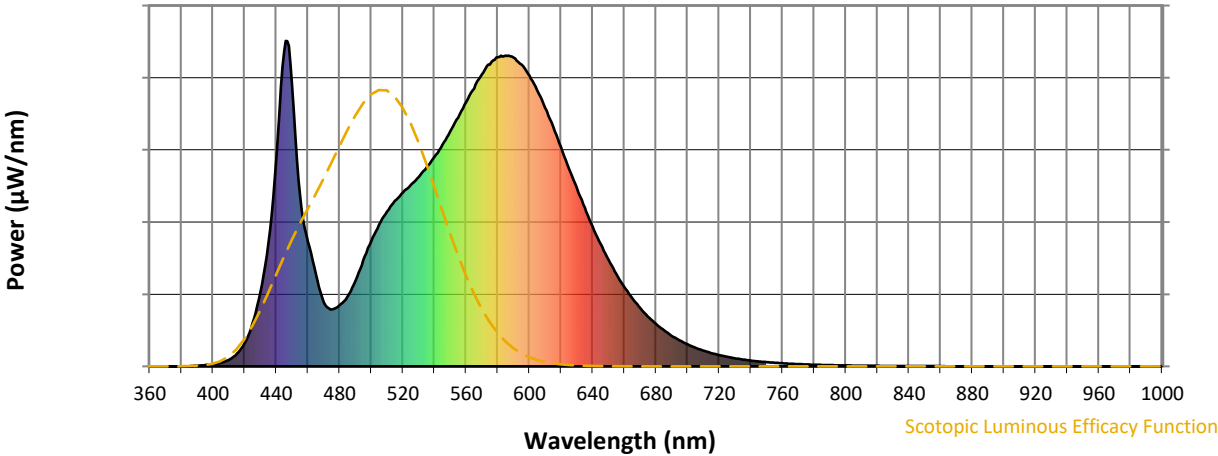


Photopic Lumens: NR

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	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			

REPORT NUMBER: SP1-2501-319-6

Scotopic Flux vs. Wavelength

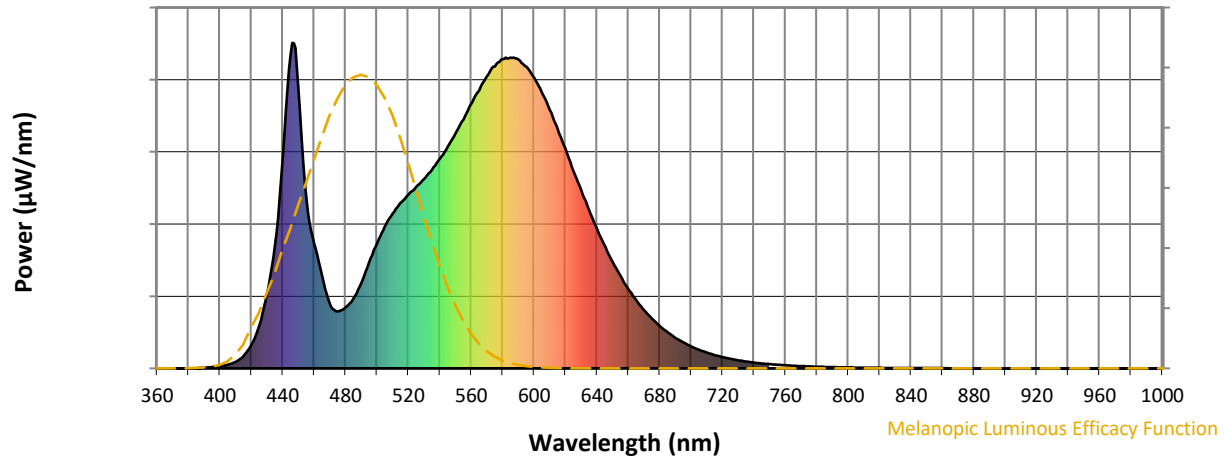


Scotopic Lumens: NR S/P: 1.56

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	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



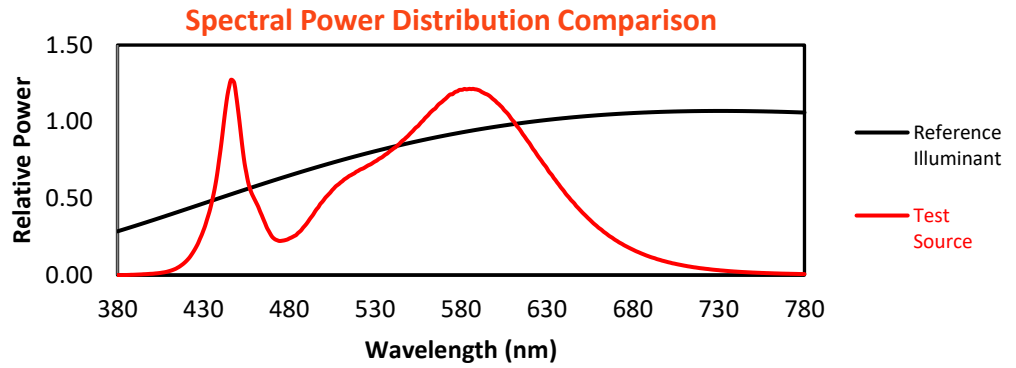
Melanopic Lumens: NR

M/P: 3.08

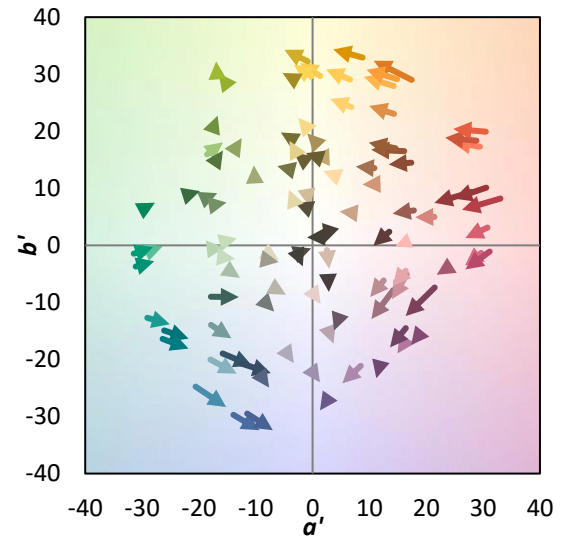
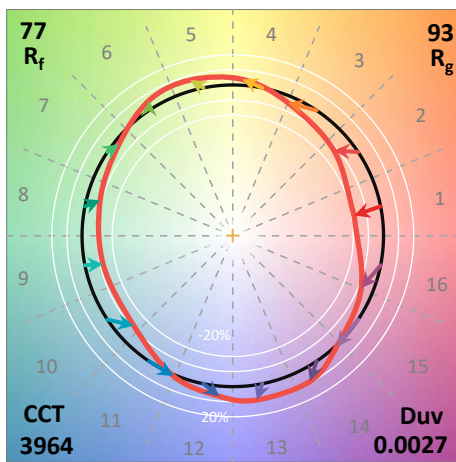
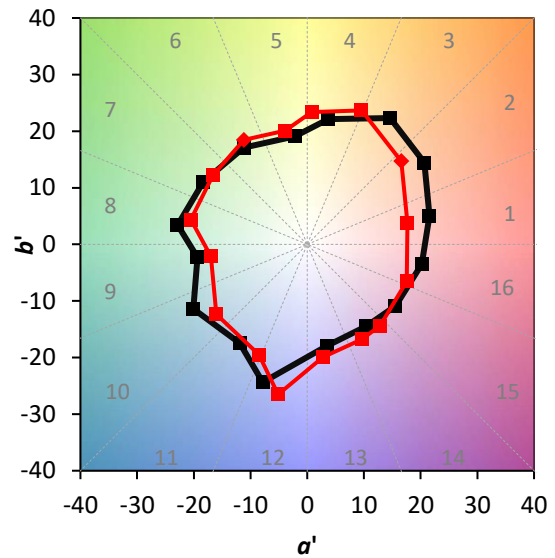
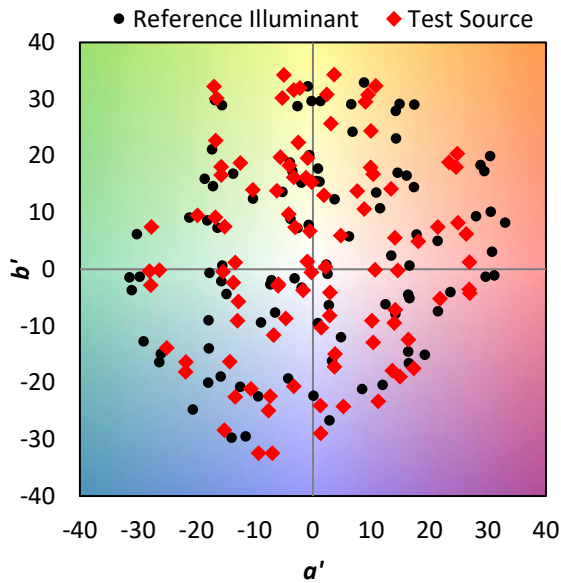
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	262	NR	620	674	NR	750	13	NR	880	0	NR
365	0	NR	495	326	NR	625	608	NR	755	11	NR	885	0	NR
370	0	NR	500	384	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 $R_a = 72.6$
 $R_g = -43.1$

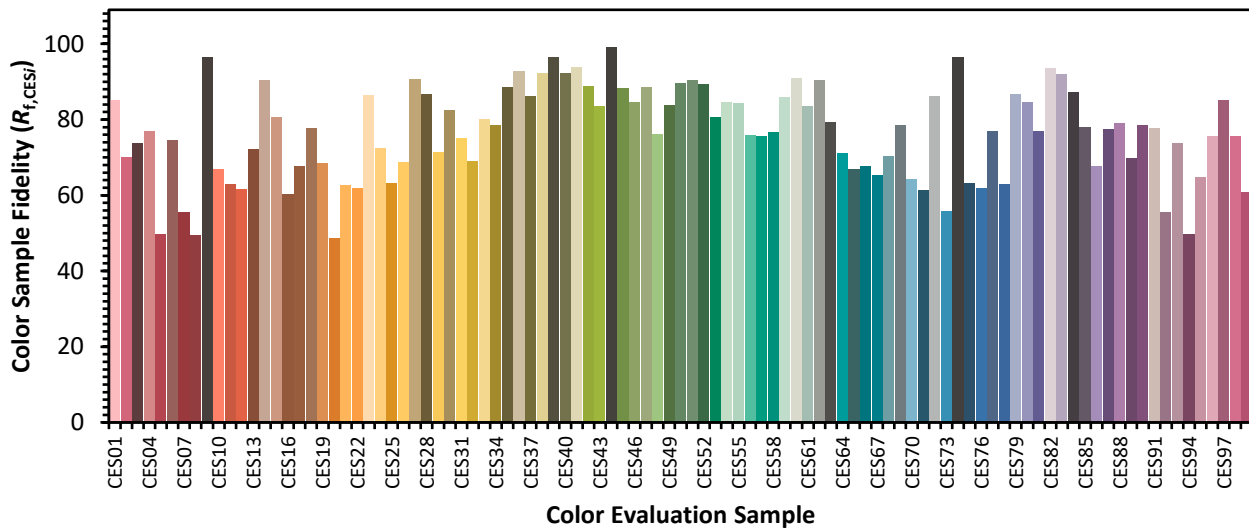


Color Vector Graphics

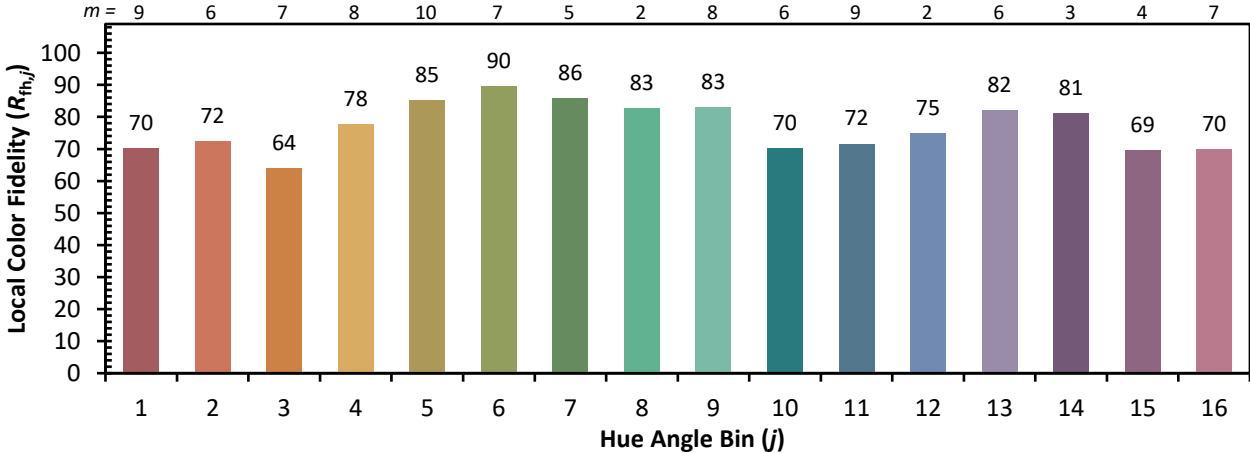
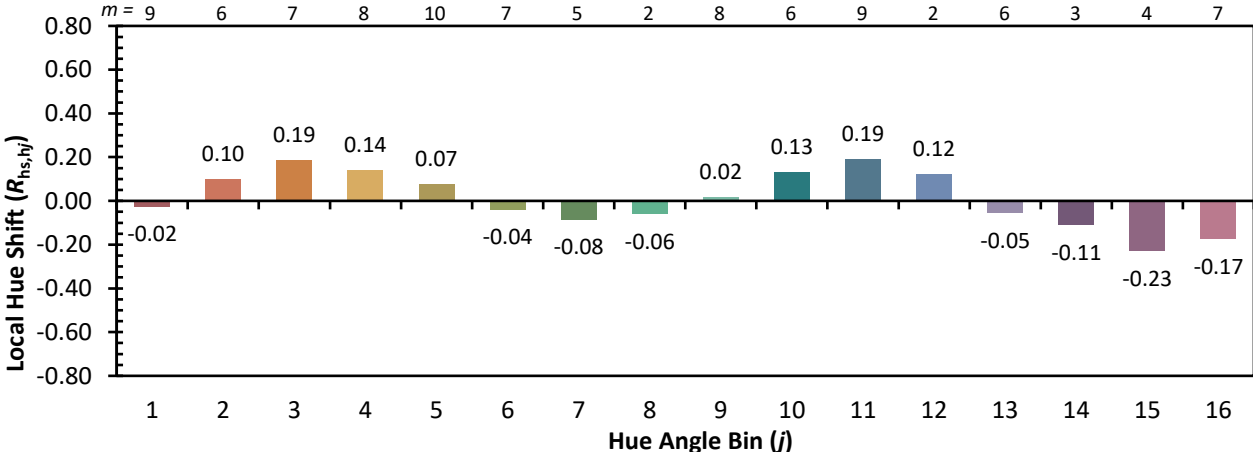
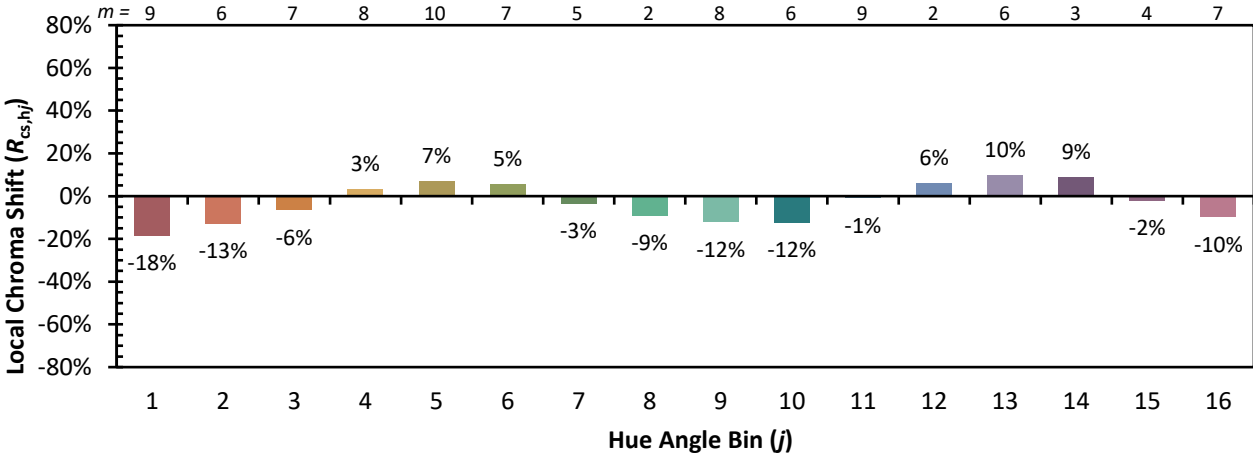


Individual Sample Fidelity Index ($R_{f,i}$)

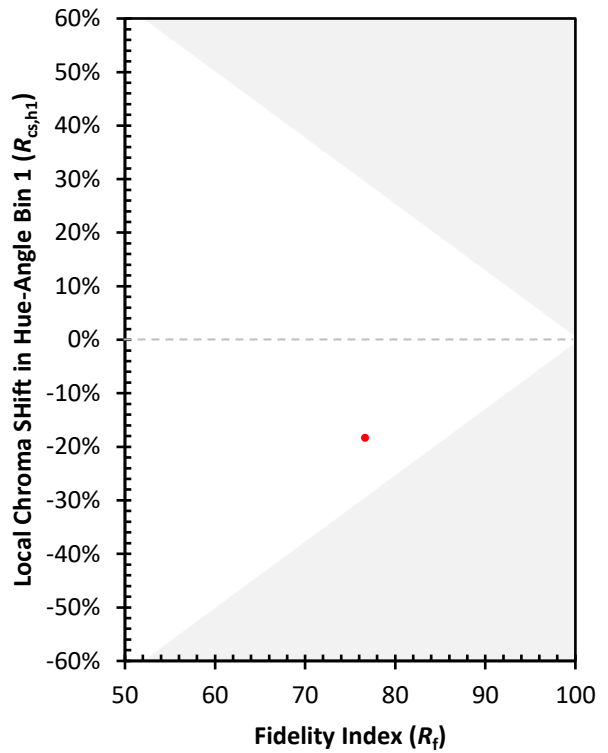
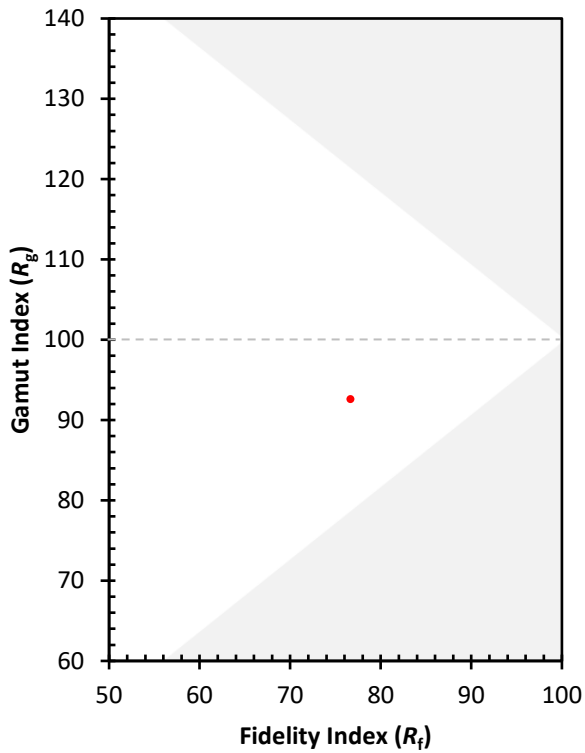
CES01 = 85	CES26 = 69	CES51 = 90	CES76 = 62
CES02 = 61	CES27 = 91	CES52 = 89	CES77 = 77
CES03 = 30	CES28 = 87	CES53 = 81	CES78 = 63
CES04 = 70	CES29 = 71	CES54 = 85	CES79 = 87
CES05 = 47	CES30 = 82	CES55 = 84	CES80 = 85
CES06 = 50	CES31 = 75	CES56 = 76	CES81 = 77
CES07 = 39	CES32 = 69	CES57 = 76	CES82 = 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)