

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: McGRAW-EDISON

Report Number: P324646

Luminaire Tested: **GLEON-SA2C-830-U-SLR-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-28)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA2C-830-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8525 lumens
Efficiency: N/A
Efficacy: 75.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

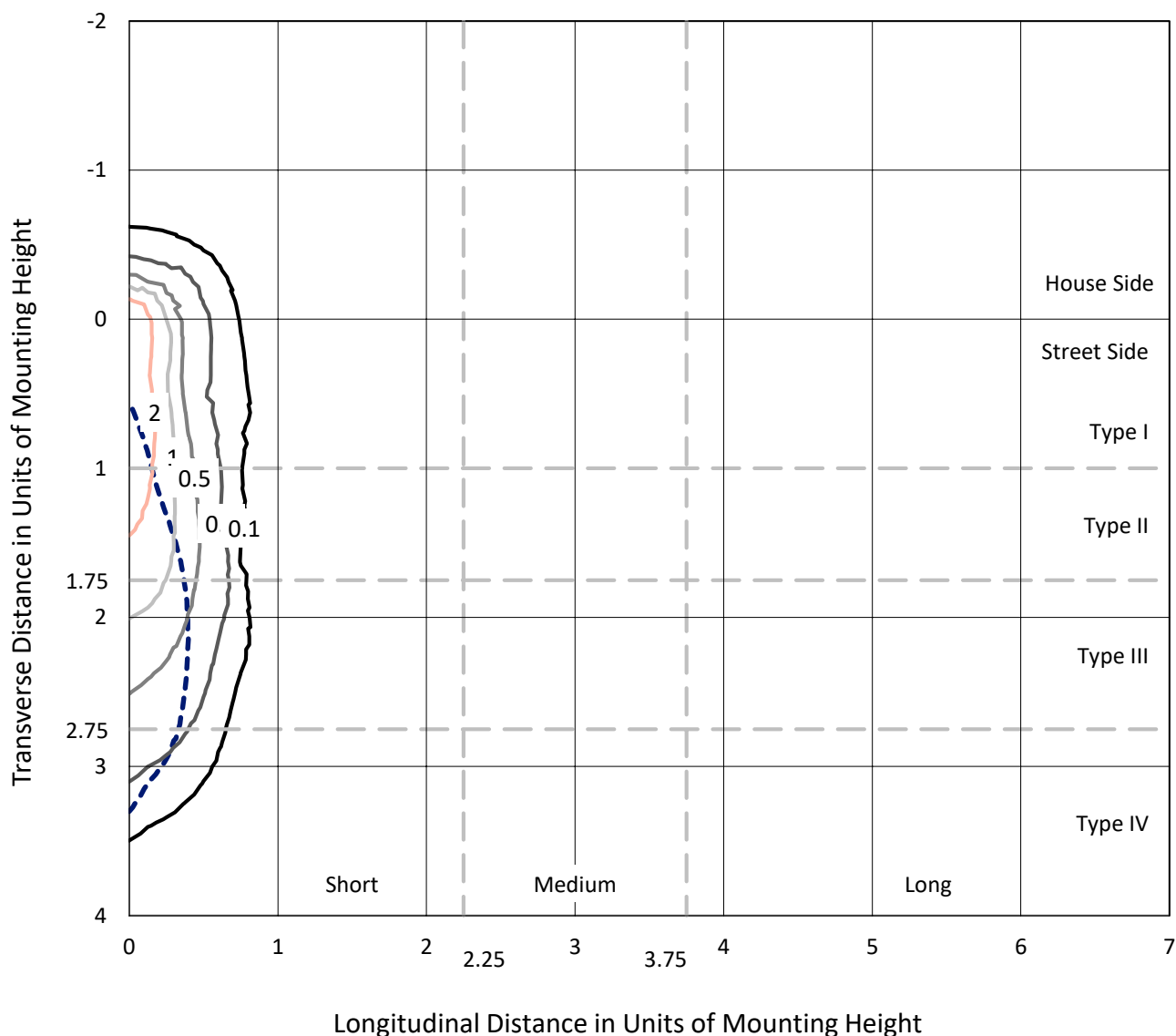
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

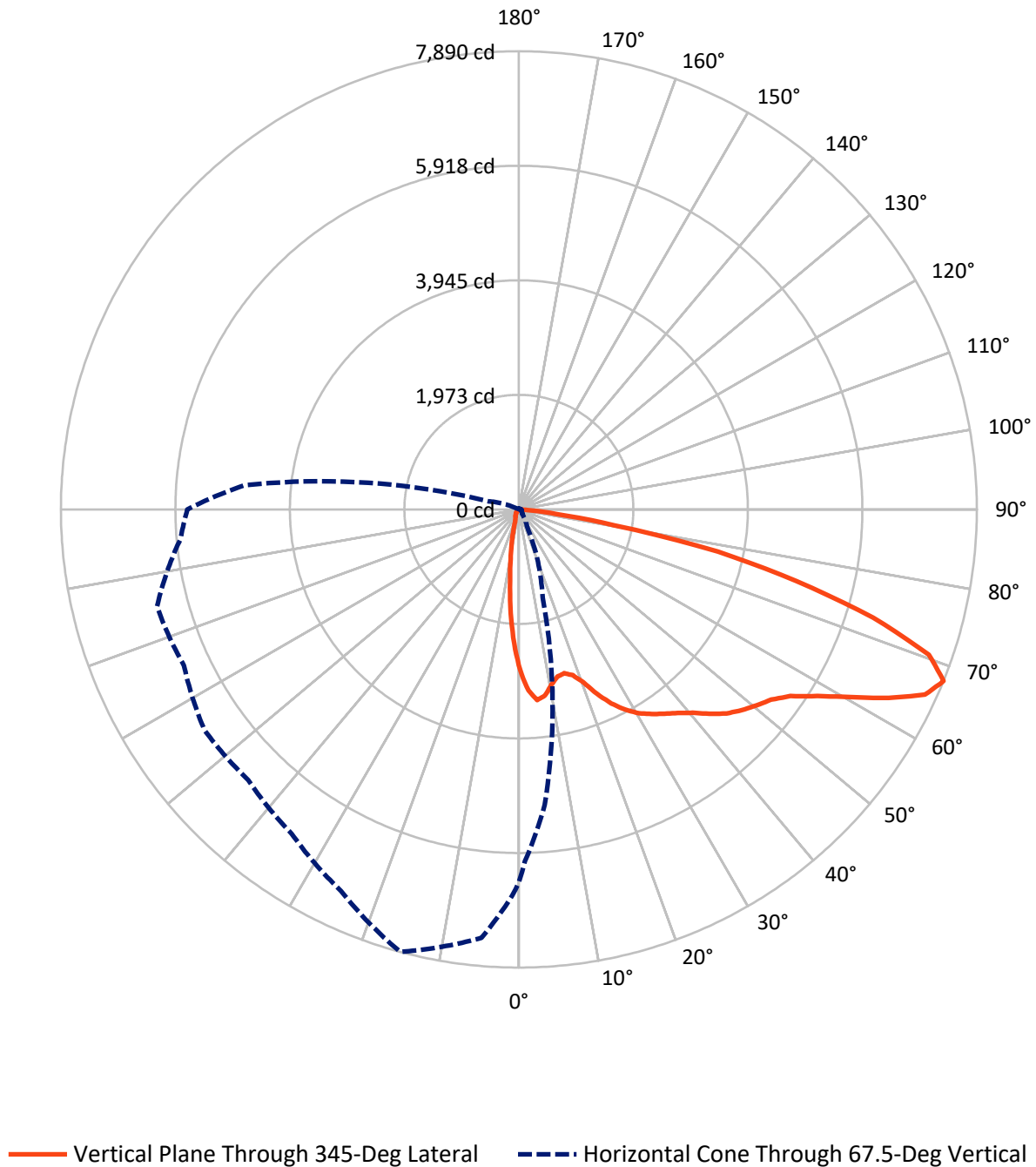
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1031.8	0.0	1031.8
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	7493.2	0.0	7493.2
	% Fixture	87.9	0.0	87.9
Total	Lumens	8525.0	0.0	8525.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.1	2.5
10°-20°	424.2	5.0
20°-30°	602.4	7.1
30°-40°	889.8	10.4
40°-50°	1283.3	15.1
50°-60°	1801.5	21.1
60°-70°	2100.0	24.6
70°-80°	1073.6	12.6
80°-90°	137.1	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	8525.0	100.0
0°-180°	8525.0	100.0

Coefficient of Utilization



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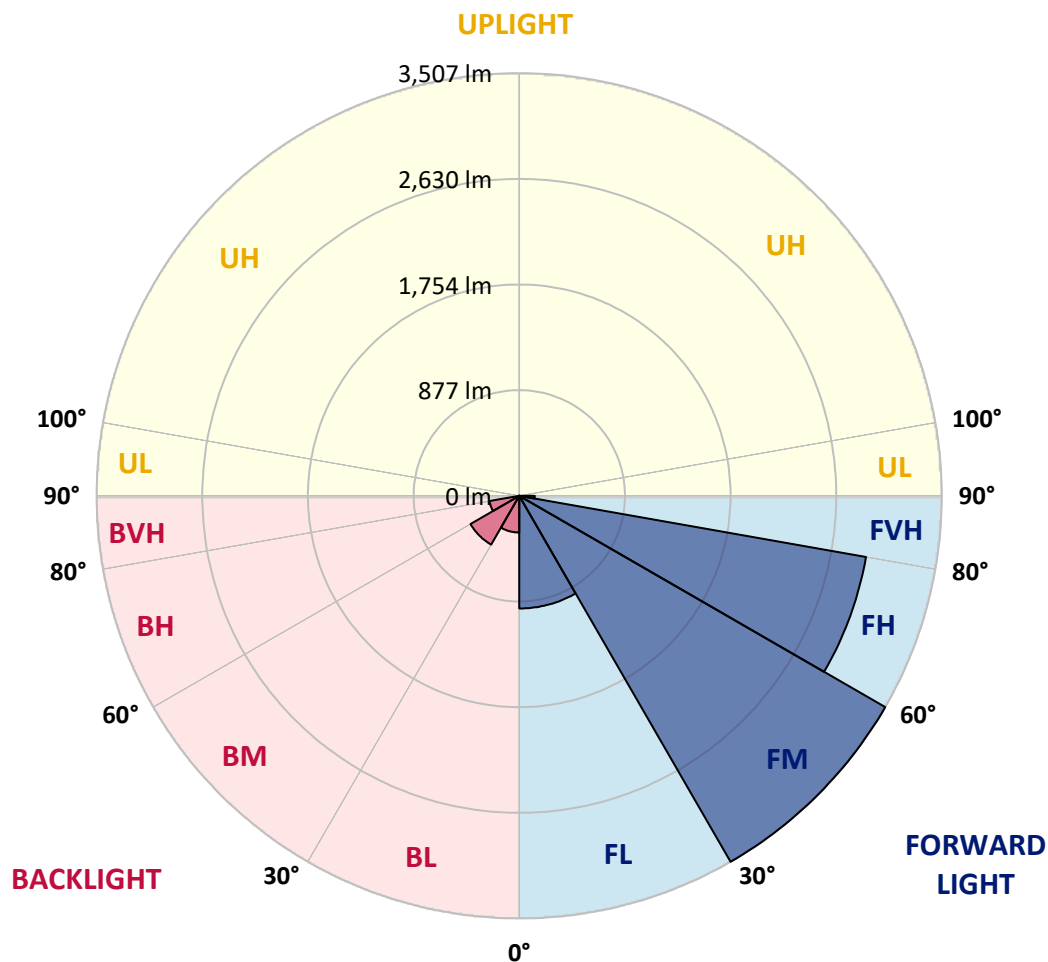
CATALOG NUMBER: GLEON-SA2C-830-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	935.0	11.0			
FM	(30°-60°)	3507.3	41.1			
FH	(60°-80°)	2922.1	34.3			G2/5000
FVH	(80°-90°)	128.8	1.5			G2/225
BL	(0°-30°)	304.8	3.6	B1/500		
BM	(30°-60°)	467.2	5.5	B1/1000		
BH	(60°-80°)	251.5	2.9	B1/500		G1/500
BVH	(80°-90°)	8.3	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0
2.5°	3040.7	3017.3	2991.5	2907.0	2828.7	2739.0	2665.9	2615.1	2551.2	2468.4	2447.4
5°	3018.9	2993.9	2912.7	2724.9	2560.5	2400.6	2246.3	2155.9	2043.6	1929.7	1901.4
7.5°	2799.6	2773.4	2656.2	2399.0	2177.7	1946.6	1746.3	1622.3	1495.5	1391.3	1336.0
10°	2571.4	2542.8	2411.1	2098.9	1826.3	1617.5	1470.5	1352.2	1232.2	1120.7	1031.9
12.5°	2414.3	2376.8	2233.8	1880.0	1642.5	1500.8	1363.5	1221.7	1059.3	939.8	842.1
15°	2348.5	2305.7	2154.6	1795.6	1577.5	1411.1	1232.2	1058.1	867.9	731.0	641.3
17.5°	2399.4	2343.7	2181.7	1789.9	1495.9	1269.4	1043.2	838.8	632.5	493.9	430.1
20°	2572.2	2499.1	2293.6	1788.3	1397.0	1100.9	814.2	583.2	416.8	335.2	301.7
22.5°	2844.4	2747.9	2454.3	1801.3	1294.8	924.1	588.0	396.2	313.0	270.6	250.8
25°	3173.2	3061.3	2685.7	1846.9	1205.1	752.0	427.3	313.0	264.1	233.0	216.5
27.5°	3485.8	3394.9	2978.1	1912.7	1135.7	613.1	346.9	265.3	225.8	205.2	191.8
30°	3798.0	3683.7	3278.2	1991.1	1052.1	519.0	304.9	241.9	202.3	180.5	172.0
32.5°	4025.0	3930.0	3513.3	2047.6	962.8	457.6	272.6	221.3	189.0	166.8	154.3
35°	4291.9	4184.5	3714.8	2060.1	905.5	418.8	245.1	199.1	164.0	144.2	130.9
37.5°	4580.3	4446.6	3947.4	2032.7	860.6	399.8	224.6	189.0	153.1	132.9	118.7
40°	4899.3	4748.3	4170.8	1993.1	816.6	393.4	208.8	181.3	144.6	124.0	109.4
42.5°	5235.4	5057.2	4364.2	1951.5	788.8	371.2	207.2	173.7	138.1	115.9	101.4
45°	5517.7	5337.1	4562.9	1937.8	769.0	346.9	214.1	168.4	133.7	109.4	95.3
47.5°	5742.6	5571.8	4766.5	1968.5	757.7	324.7	195.1	175.3	131.3	103.8	90.1
50°	6011.2	5817.7	5053.2	2060.1	741.1	302.5	176.5	200.7	131.3	100.2	85.6
52.5°	6348.0	6156.6	5373.1	2202.3	708.0	271.8	158.7	201.1	132.5	95.3	80.0
55°	6771.7	6632.7	5829.8	2358.2	655.1	226.6	137.3	172.9	127.6	86.4	74.7
57.5°	7178.0	7064.5	6246.2	2464.8	584.4	176.9	119.5	139.3	116.7	75.9	66.6
59°	7289.0	7165.0	6398.9	2469.7	531.5	154.3	110.7	115.1	114.3	71.1	61.8
60°	7289.0	7157.4	6442.9	2443.8	493.1	141.8	105.0	102.6	119.1	67.8	59.0
62.5°	7157.0	6972.0	6300.0	2268.9	402.3	120.8	91.7	84.8	107.0	61.0	52.1
65°	6882.3	6613.0	5812.9	1952.7	358.6	110.7	79.2	69.5	74.3	53.7	45.6
67.5°	6424.3	6059.2	5110.6	1577.5	341.3	107.8	68.3	59.0	56.1	46.0	40.0
70°	5617.8	5212.7	4258.0	1240.3	326.3	106.6	57.3	49.7	45.2	38.8	33.9
72.5°	4088.8	3666.3	3023.0	969.7	317.4	109.0	46.0	41.6	37.2	30.3	26.3
75°	2338.8	2062.2	1699.1	640.5	270.6	104.2	35.5	34.7	26.7	21.8	18.2
77.5°	1208.4	1171.6	1018.2	246.0	129.6	45.6	23.4	20.2	15.8	13.3	10.9
80°	521.4	515.7	446.3	71.1	34.3	25.4	13.3	8.5	7.3	5.7	4.4
82.5°	180.1	180.1	158.7	23.8	15.3	12.5	1.6	0.0	0.0	0.0	0.0
85°	36.3	40.8	28.7	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0
2.5°	2422.0	2373.1	2369.9	2339.2	2300.8	2283.5	2273.4	2291.1	2313.0	2315.4	2348.1
5°	1880.0	1828.7	1850.1	1795.6	1806.5	1795.6	1777.8	1781.1	1790.8	1760.5	1798.0
7.5°	1320.2	1281.5	1306.1	1291.6	1311.0	1318.6	1307.7	1291.6	1243.9	1238.3	1271.0
10°	995.1	951.1	924.9	897.4	903.5	916.0	911.9	900.2	869.9	871.5	903.1
12.5°	799.7	750.4	698.3	630.8	614.3	623.6	614.3	607.4	578.3	580.8	608.6
15°	606.6	566.2	511.7	457.6	428.1	430.9	405.1	386.9	368.7	346.9	363.9
17.5°	409.5	384.9	368.7	352.6	317.4	309.4	276.7	241.5	227.8	217.7	225.0
20°	290.0	276.7	270.2	269.4	249.2	239.1	207.2	185.4	178.5	176.5	180.9
22.5°	242.3	232.6	223.3	218.1	208.0	196.3	172.0	161.1	156.3	153.9	157.1
25°	210.8	203.5	193.9	185.0	180.9	168.4	151.0	143.0	139.7	137.3	138.9
27.5°	187.4	180.9	169.6	164.0	160.7	149.8	134.9	128.4	125.6	124.8	124.4
30°	168.8	162.8	152.3	145.8	140.1	130.4	121.6	115.1	112.3	111.5	110.7
32.5°	150.2	145.4	138.5	132.1	126.0	117.1	109.4	104.2	99.8	98.9	98.5
35°	126.8	122.0	118.3	117.9	112.3	103.8	98.1	91.3	87.6	86.4	86.8
37.5°	112.7	106.2	98.1	101.0	99.4	93.3	85.6	78.8	75.1	74.3	74.3
40°	103.8	96.9	87.6	82.8	87.6	86.4	74.3	67.4	63.8	63.4	62.6
42.5°	95.3	88.4	77.9	69.9	72.3	75.9	64.2	57.8	54.1	53.3	52.1
45°	89.3	82.0	70.3	61.0	56.1	63.8	54.9	46.8	44.8	43.2	42.4
47.5°	83.6	76.7	63.4	52.9	44.8	46.0	44.0	38.4	35.9	34.3	33.9
50°	78.8	71.5	57.3	45.2	37.2	33.9	35.5	30.3	28.3	26.7	25.8
52.5°	73.1	66.2	50.9	39.2	31.1	26.7	27.1	23.8	21.8	20.6	20.2
55°	68.7	61.8	45.6	34.3	27.5	21.8	19.4	18.6	17.4	16.6	16.2
57.5°	62.6	56.1	40.4	29.1	23.4	17.8	14.9	14.9	14.5	13.7	13.3
59°	59.0	53.3	37.2	26.3	21.4	15.3	13.3	13.7	13.3	12.5	12.1
60°	56.1	50.9	34.7	24.2	20.2	14.1	12.1	12.9	12.5	11.7	11.3
62.5°	49.7	46.0	29.9	20.2	17.8	11.3	10.1	10.9	10.9	10.5	10.1
65°	43.6	39.6	25.4	17.0	16.6	9.7	8.1	9.7	10.1	9.3	8.5
67.5°	38.0	33.9	22.2	13.7	15.3	7.7	6.1	8.1	10.9	8.5	7.7
70°	32.3	28.3	17.4	10.9	16.2	5.3	4.8	7.3	12.9	9.3	7.3
72.5°	25.0	21.8	12.1	8.1	17.4	3.6	3.6	6.1	14.5	10.1	6.9
75°	17.4	14.1	7.3	4.8	14.1	2.4	2.4	5.7	13.7	9.3	6.5
77.5°	10.1	7.7	2.4	0.4	7.3	0.0	0.4	4.0	9.7	5.7	2.8
80°	3.6	1.6	0.0	0.0	4.4	0.0	0.0	0.0	0.8	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0
2.5°	2356.6	2411.1	2460.0	2533.9	2621.5	2722.5	2809.3	2902.6	2990.2	3026.6	3051.6
5°	1805.7	1873.1	1951.9	2060.5	2205.1	2383.2	2550.0	2738.6	2941.4	3042.7	3138.1
7.5°	1276.6	1345.3	1443.0	1558.5	1733.4	1945.4	2163.5	2424.0	2698.7	2859.0	3016.9
10°	918.0	1002.4	1093.7	1251.6	1429.3	1630.4	1855.0	2145.8	2451.9	2629.6	2819.8
12.5°	624.8	720.9	859.0	1035.9	1244.7	1441.8	1636.9	1914.3	2269.7	2445.8	2649.8
15°	374.8	428.1	574.3	779.1	1035.1	1280.7	1494.3	1772.6	2151.4	2367.1	2579.1
17.5°	231.0	255.6	335.2	503.2	772.2	1082.8	1375.6	1724.5	2168.4	2430.9	2657.9
20°	184.2	193.9	219.3	297.2	511.7	864.7	1241.9	1714.8	2306.9	2630.0	2873.5
22.5°	159.9	169.2	186.2	216.1	321.9	647.4	1115.1	1723.7	2505.6	2928.5	3212.8
25°	141.0	149.0	165.2	189.8	235.9	456.0	979.4	1763.3	2764.5	3298.8	3600.9
27.5°	126.0	132.9	147.8	170.4	202.3	318.2	825.5	1811.4	3071.4	3677.6	3975.7
30°	112.3	118.3	131.7	152.7	175.7	244.7	656.7	1844.1	3378.8	3975.7	4243.5
32.5°	100.6	105.0	117.1	134.9	152.7	195.1	499.2	1838.8	3607.0	4223.7	4436.1
35°	88.4	92.9	103.4	118.7	132.9	161.1	392.6	1740.7	3805.7	4480.9	4656.6
37.5°	75.1	80.8	90.9	104.6	114.3	141.8	317.4	1622.3	4007.2	4774.9	4902.6
40°	63.8	69.5	78.4	93.3	99.4	134.5	243.9	1478.2	4233.8	5103.7	5172.3
42.5°	52.9	58.2	67.4	80.4	93.7	115.9	180.5	1313.4	4451.4	5384.8	5418.3
45°	42.8	48.1	57.8	70.7	100.2	96.1	139.7	1136.9	4627.1	5618.6	5629.5
47.5°	33.9	38.8	48.9	66.6	93.3	76.7	99.8	998.4	4774.5	5801.2	5772.5
50°	26.3	30.3	40.8	76.3	81.6	63.4	75.5	952.3	4906.6	5914.3	5839.9
52.5°	20.6	24.2	33.5	71.5	63.4	52.5	63.4	995.5	5087.5	6008.0	5877.9
55°	16.6	20.2	26.3	40.8	43.2	44.4	54.1	1035.9	5399.7	6227.7	6102.1
57.5°	13.7	17.4	21.4	28.7	32.7	37.6	48.1	1040.4	5767.7	6592.8	6474.0
59°	12.5	15.8	19.4	25.4	28.7	34.3	45.2	1016.1	5897.3	6725.6	6666.3
60°	11.7	14.9	18.2	23.4	26.7	32.3	43.6	993.1	5902.9	6720.8	6748.2
62.5°	10.1	13.3	16.2	19.8	22.6	27.5	39.2	907.9	5663.9	6500.7	6699.0
65°	8.9	11.7	14.5	17.0	19.4	24.6	35.5	752.4	5255.5	6145.7	6361.7
67.5°	8.1	10.1	13.3	14.9	17.4	21.8	31.5	536.3	4745.5	5711.5	5851.7
70°	7.3	9.7	12.1	13.7	15.8	19.0	27.1	308.2	4007.2	5075.8	5175.6
72.5°	6.9	9.3	10.9	12.9	14.1	17.0	24.6	145.0	2934.1	4066.2	4326.6
75°	6.1	8.5	10.1	12.1	13.3	15.3	21.0	69.5	1951.5	2942.6	3238.6
77.5°	3.6	6.9	9.3	10.9	11.7	13.3	17.4	40.0	1245.5	2036.7	2399.0
80°	0.0	2.4	6.9	9.3	10.1	11.3	13.3	31.5	666.4	1163.5	1396.6
82.5°	0.0	0.0	4.8	7.3	6.9	7.7	10.1	19.8	300.5	760.5	857.0
85°	0.0	0.0	1.6	5.7	4.8	3.6	6.9	6.9	65.8	384.9	480.2
87.5°	0.0	0.0	0.0	0.4	2.4	1.6	2.8	0.8	0.4	28.7	116.3
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0	2777.0
2.5°	3139.3	3169.2	3219.6	3243.5	3231.8	3182.1	3122.7	3062.1	3026.6	3040.7
5°	3332.3	3486.2	3575.0	3604.5	3555.3	3443.8	3298.0	3105.8	3037.5	3018.9
7.5°	3332.3	3621.9	3805.3	3837.6	3727.7	3509.2	3235.8	2935.7	2836.0	2799.6
10°	3215.2	3609.4	3865.0	3916.3	3762.8	3436.1	3069.8	2727.3	2609.0	2571.4
12.5°	3083.1	3507.6	3777.0	3847.7	3721.7	3363.4	2954.7	2586.4	2447.0	2414.3
15°	3002.0	3382.4	3605.3	3656.6	3603.3	3321.0	2927.2	2544.0	2380.0	2348.5
17.5°	3031.0	3285.5	3365.8	3395.7	3431.7	3306.1	3002.0	2636.9	2429.3	2399.4
20°	3140.5	3183.3	3141.7	3179.3	3276.2	3320.6	3180.1	2861.4	2612.2	2572.2
22.5°	3326.3	3130.4	3013.7	3028.6	3146.5	3368.7	3452.3	3182.1	2894.5	2844.4
25°	3542.7	3173.2	2942.6	2929.3	3050.4	3432.1	3701.1	3531.0	3228.5	3173.2
27.5°	3814.9	3269.3	2928.0	2914.7	3016.9	3491.4	3907.8	3875.9	3580.3	3485.8
30°	4025.0	3363.8	2971.3	2940.6	3050.4	3532.6	4073.8	4168.7	3860.6	3798.0
32.5°	4175.6	3475.3	3041.5	2997.1	3144.9	3603.7	4201.9	4436.9	4119.9	4025.0
35°	4290.3	3596.5	3155.0	3081.9	3275.0	3711.6	4321.8	4722.4	4395.7	4291.9
37.5°	4397.7	3766.5	3332.3	3245.1	3478.9	3885.2	4448.6	5046.3	4704.3	4580.3
40°	4547.6	3959.1	3605.7	3528.2	3821.8	4121.9	4606.9	5384.0	5055.2	4899.3
42.5°	4697.4	4165.9	3885.6	3906.6	4249.5	4409.4	4811.3	5741.0	5401.7	5235.4
45°	4834.3	4379.2	4284.2	4381.2	4646.5	4724.9	5014.4	5947.4	5678.4	5517.7
47.5°	4956.3	4645.7	4680.4	4938.5	5098.0	5010.4	5166.3	6125.5	5884.4	5742.6
50°	5098.0	4990.6	5202.6	5567.7	5617.8	5268.9	5304.4	6336.3	6125.1	6011.2
52.5°	5253.1	5354.1	5781.0	6102.9	6086.7	5549.6	5443.3	6572.6	6455.0	6348.0
55°	5429.2	5647.7	6290.3	6603.7	6589.9	5863.0	5673.6	6864.6	6868.6	6771.7
57.5°	5690.5	5900.5	6636.0	7008.7	7031.8	6224.8	6063.7	7191.7	7242.6	7178.0
59°	5877.9	6064.5	6772.9	7178.0	7271.7	6504.7	6348.8	7381.5	7348.0	7289.0
60°	6016.8	6168.7	6840.7	7266.4	7411.0	6694.5	6559.2	7493.0	7360.5	7289.0
62.5°	6360.5	6395.7	6963.1	7366.6	7571.3	7116.2	7151.3	7682.8	7273.7	7157.0
65°	6520.9	6539.0	6961.5	7187.3	7416.2	7444.5	7688.5	7688.5	7061.6	6882.3
67.5°	6453.8	6366.2	6616.2	6592.8	6821.3	7249.4	7890.4	7406.6	6656.2	6424.3
70°	5908.6	5571.4	5460.3	5470.4	5645.3	6305.6	7490.6	6577.0	5888.8	5617.8
72.5°	4916.3	4107.3	3833.1	4146.1	4191.8	4846.0	6383.6	4953.0	4342.8	4088.8
75°	3954.3	2895.3	2449.5	2779.8	2857.4	3546.4	4938.1	3084.8	2536.7	2338.8
77.5°	2840.8	2078.3	1757.6	1734.6	1834.8	2249.1	3504.0	1552.5	1294.8	1208.4
80°	1613.9	1367.9	1472.9	1389.7	1440.2	1406.3	1664.7	680.9	557.7	521.4
82.5°	974.1	808.5	875.6	729.0	922.4	803.3	641.3	218.1	189.4	180.1
85°	633.7	441.8	230.2	154.3	317.8	513.3	143.4	59.4	45.6	36.3
87.5°	218.5	112.7	11.3	4.8	33.9	95.7	5.3	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2408-195-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/07/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **GALN-SB1A-830-U-5WQ**
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K): 3050
 CIE u' : 0.2476
 CIE v' : 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 81.0
 R1: 79.6
 R2: 85.6
 R3: 92.0
 R4: 82.6
 R5: 78.9
 R6: 81.7
 R7: 85.2
 R8: 62.0
 R9: 7.1
 R10: 67.0
 R11: 82.7
 R12: 63.2
 R13: 80.3
 R14: 95.0
 R15: 71.7



Test Conditions

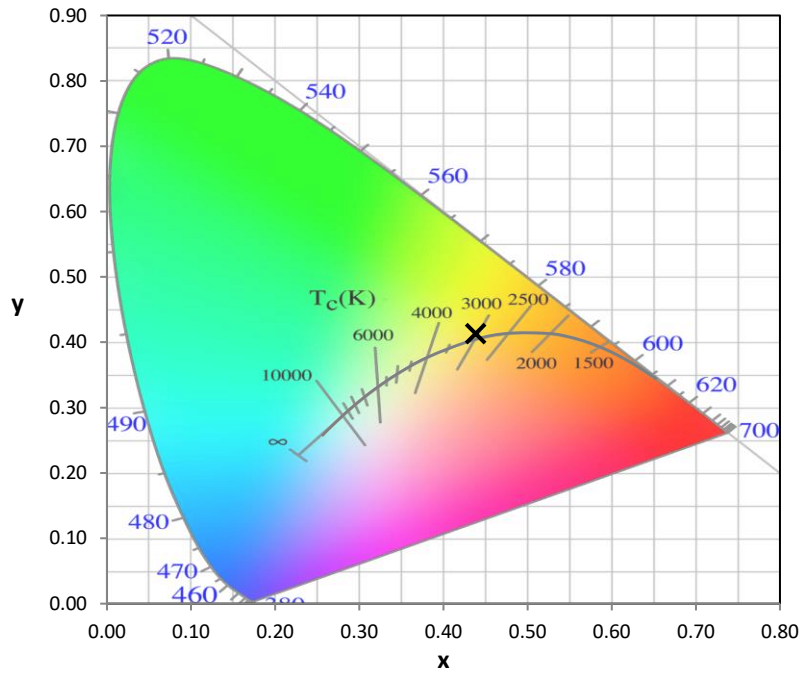
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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Scotopic Flux vs. Wavelength


Scotopic Lumens: NR
S/P: 1.27

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.32

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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TM-30-18

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_9 = 7.1$



Color Vector Graphics



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

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin


Measure Comparisons



(END OF REPORT)