

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: P324344

Luminaire Tested: **GLEON-SA0D-830-U-SLL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324344
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA0D-830-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(10) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45243 lumens
Efficiency: N/A
Efficacy: 70.7 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

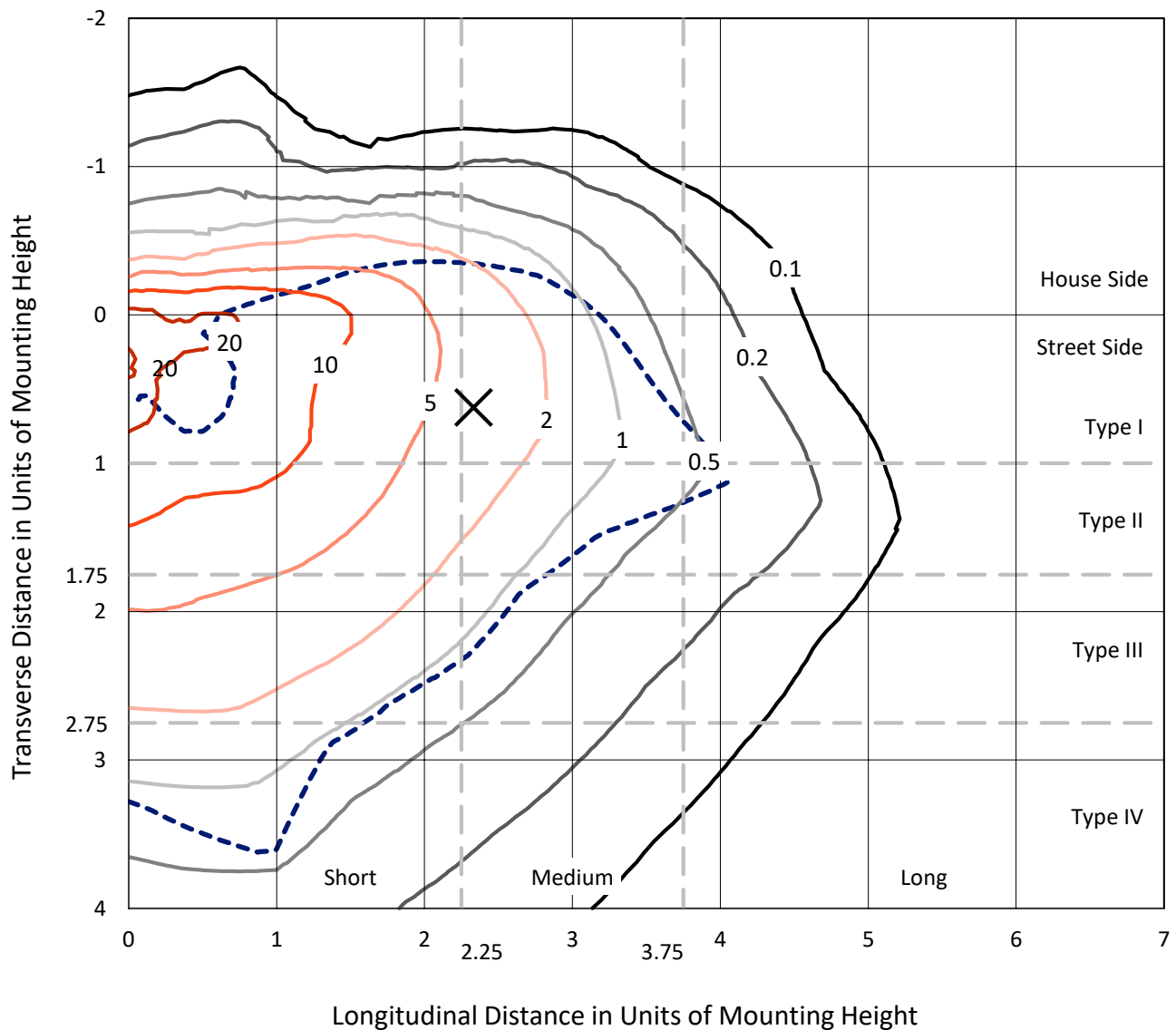
Input Watts (W): 640
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

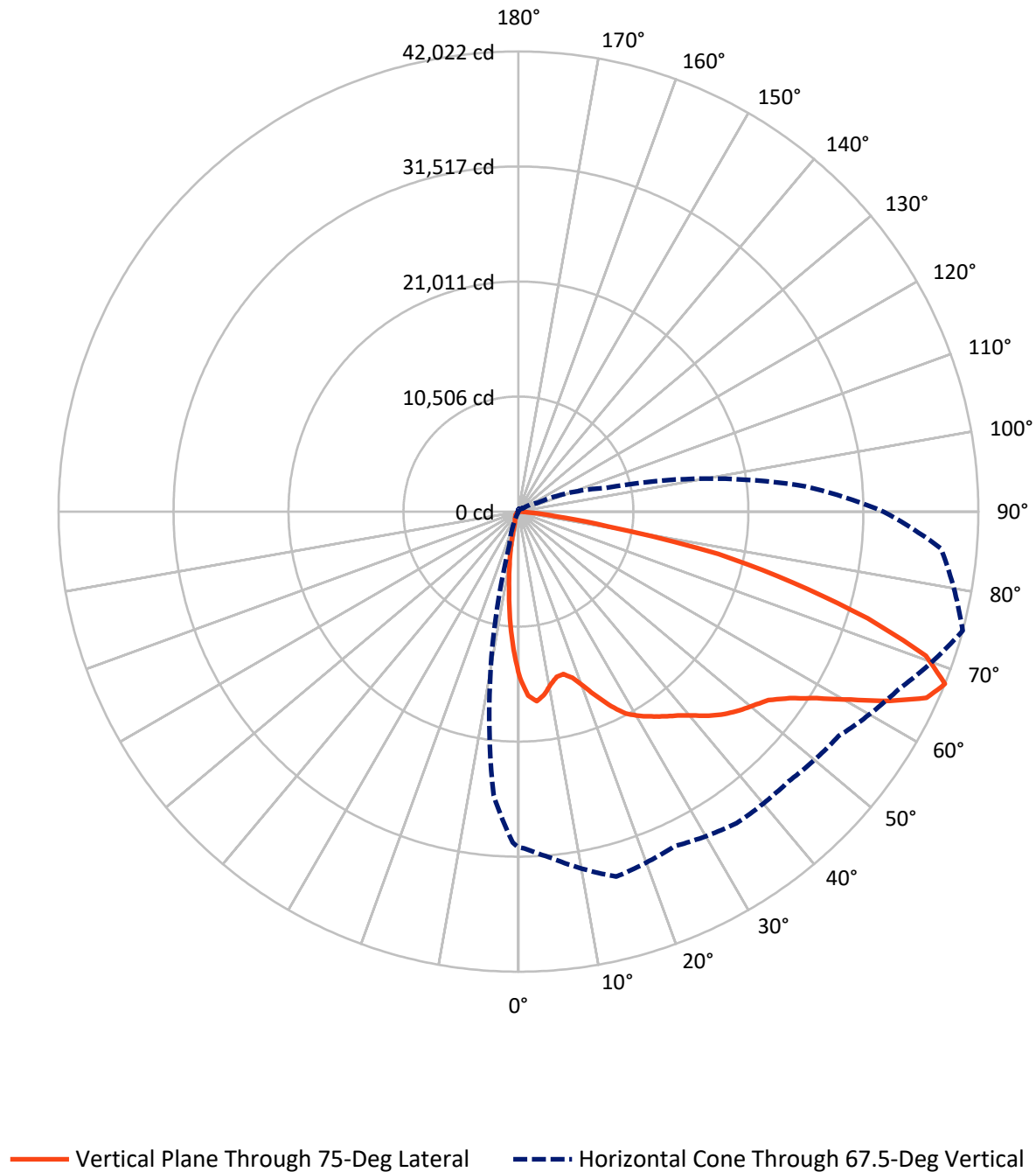
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 31.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6789.2	0.0	6789.2
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	38453.8	0.0	38453.8
	% Fixture	85.0	0.0	85.0
Total	Lumens	45243.0	0.0	45243.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1151.3	2.5
10°-20°	2267.0	5.0
20°-30°	3207.2	7.1
30°-40°	4715.4	10.4
40°-50°	6777.6	15.0
50°-60°	9541.1	21.1
60°-70°	11143.2	24.6
70°-80°	5684.9	12.6
80°-90°	755.2	1.7
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°	45243.0	100.0
0°-180°	45243.0	100.0

Coefficient of Utilization



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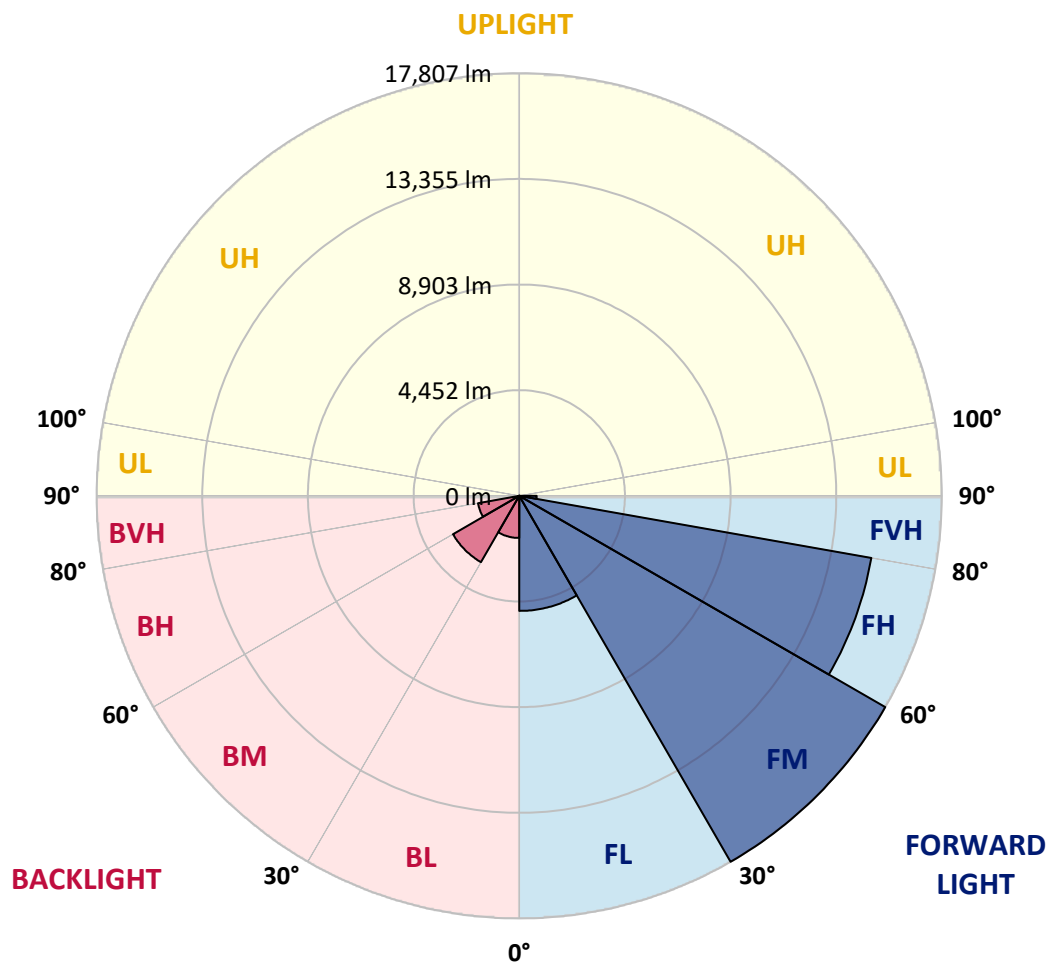
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4850.1	10.7			
FM	(30°-60°)	17806.8	39.4			
FH	(60°-80°)	15064.6	33.3			G5
FVH	(80°-90°)	732.3	1.6			G4/750
BL	(0°-30°)	1775.5	3.9	B3/2500		
BM	(30°-60°)	3227.4	7.1	B3/5000		
BH	(60°-80°)	1763.5	3.9	B3/2500		G3/2500
BVH	(80°-90°)	22.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3
2.5°	16453.5	16479.2	16612.1	16920.7	17257.2	17282.9	17510.1	17276.5	17197.2	16820.0	16429.9
5°	16577.8	16676.4	17132.9	18039.4	18826.0	19078.9	19258.9	18800.3	18318.1	17396.5	16412.7
7.5°	15576.9	15741.9	16459.9	18161.6	19567.6	20189.1	20307.0	19589.0	18408.1	16890.7	15411.9
10°	14295.2	14483.9	15349.7	17441.5	19372.5	20437.7	20600.6	19659.7	17962.3	16072.0	14329.5
12.5°	13257.9	13478.7	14363.8	16631.4	18701.7	19880.5	20202.0	19421.8	17576.5	15491.2	13590.1
15°	12780.0	13032.9	13963.0	16108.4	17958.0	18886.0	19151.8	18815.3	17362.2	15399.0	13418.7
17.5°	13054.3	13328.7	14288.8	16153.4	17259.3	17655.8	17870.1	18007.3	17362.2	15954.1	13920.2
20°	14179.5	14475.3	15491.2	16609.9	16680.6	16532.8	16762.1	17244.3	17563.7	17008.6	15124.7
22.5°	15735.5	16082.7	17229.3	17392.2	16397.7	15838.4	15868.4	16624.9	17930.1	18345.9	16796.4
25°	17632.2	18056.6	19222.5	18558.1	16515.6	15424.7	15414.0	16114.8	18288.1	19685.4	18658.8
27.5°	19516.1	19983.3	21007.8	19981.2	17002.1	15349.7	15328.3	15960.5	18637.4	20877.1	20692.7
30°	21095.7	21550.0	22433.0	21012.1	17527.2	15525.5	15422.6	16125.6	18845.3	21650.8	22175.9
32.5°	22381.6	22745.9	23459.6	21721.5	18088.7	15866.2	15643.3	16567.1	19198.9	22304.4	23538.9
35°	23796.1	24179.8	24464.8	22396.6	18718.8	16357.0	16037.7	17267.9	19743.3	22968.8	25032.8
37.5°	25410.0	25791.5	25757.2	23013.8	19518.3	17169.3	16965.7	18378.1	20589.9	23626.8	26700.2
40°	26989.5	27379.6	27101.0	23689.0	20457.0	18508.8	18358.8	20045.5	21723.6	24469.1	28654.8
42.5°	28468.3	28890.5	28294.7	24327.6	21575.8	20197.7	20454.8	22193.0	23142.4	25506.4	30339.4
45°	29660.0	30090.7	29295.6	24949.2	22754.5	22246.6	23020.3	24572.0	24848.4	26383.0	31477.4
47.5°	30525.8	30933.0	29990.0	25570.7	24263.3	24752.0	26100.1	27066.7	26389.4	27143.8	32285.4
50°	31078.8	31396.0	30193.6	26348.7	26243.7	27675.3	29308.5	29780.0	27840.4	27829.7	33267.0
52.5°	31430.3	31573.9	30343.6	27161.0	28309.7	30858.0	32450.4	32598.3	29334.2	28584.1	34589.4
55°	32641.2	32756.9	31406.7	28144.7	30017.9	33646.3	35292.3	35155.2	31025.2	30060.7	36149.6
57.5°	34707.2	34829.4	33603.5	29559.2	31400.3	35369.5	37352.0	37598.4	33007.7	32135.4	37821.3
60°	35744.5	35971.7	35534.5	31351.0	32739.8	36471.1	38755.8	39542.3	35485.2	34870.1	39441.6
62.5°	34803.7	35133.7	35768.1	33337.7	34070.7	37077.6	39193.0	40238.9	38022.8	38057.1	40440.3
65°	32926.2	33189.8	34265.7	34426.5	34842.3	37002.6	38112.8	39265.9	39576.6	40984.7	40386.8
67.5°	30658.7	30757.3	31670.3	34512.2	33723.5	34748.0	34868.0	35721.0	38348.6	42022.0	38764.3
70°	27394.6	27448.2	28245.4	31642.4	28980.6	29205.6	29027.7	29201.3	32969.1	39495.2	34668.7
72.5°	22047.3	22182.3	23316.0	26278.0	21112.8	20463.4	21860.8	21783.6	25390.7	33367.7	25748.6
75°	16232.7	16466.3	18178.8	21166.4	14818.2	13403.7	14423.8	14696.0	18050.2	25810.7	16102.0
77.5°	11365.5	11539.1	13197.9	15559.7	10724.7	9584.5	9215.8	9539.5	11914.1	18671.7	8112.1
80°	6547.5	6611.8	7670.6	8984.4	7226.9	8268.5	7490.5	7713.4	7139.1	8307.1	3489.2
82.5°	4284.3	4295.0	4708.6	5347.3	4500.8	5229.4	3870.6	4948.7	4391.4	3337.0	1135.9
85°	2314.7	2327.5	2730.5	3795.6	2548.3	1440.2	846.6	1738.1	2715.5	765.1	310.8
87.5°	255.0	233.6	823.0	1380.2	707.3	130.7	45.0	195.0	435.1	49.3	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°	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3
2.5°	16230.6	16052.7	15609.0	15139.7	14762.5	14408.8	14053.1	13618.0	13281.5	13212.9	13101.5
5°	15883.4	15319.7	14389.5	13455.1	12702.8	11753.4	11151.2	10681.8	10223.1	10195.3	10103.1
7.5°	14670.3	13928.8	12619.3	11326.9	10268.1	9363.7	8450.7	7839.9	7359.8	7190.5	7089.8
10°	13504.4	12670.7	11035.4	9560.9	8615.7	7816.3	7173.3	6534.7	5956.0	5557.4	5377.3
12.5°	12690.0	11768.4	9966.0	8695.0	8017.8	7259.1	6474.7	5677.4	5010.8	4530.8	4237.1
15°	12374.9	11391.2	9608.0	8352.1	7516.3	6556.1	5553.1	4642.2	3902.8	3467.7	3204.1
17.5°	12750.0	11605.5	9580.2	7934.2	6766.1	5572.4	4464.3	3388.4	2691.9	2361.8	2192.5
20°	13701.6	12287.1	9569.5	7422.0	5874.6	4406.5	3024.1	2228.9	1806.7	1622.4	1543.1
22.5°	15047.5	13157.2	9655.2	6916.2	4946.5	3148.4	2087.5	1637.4	1421.0	1322.4	1277.4
25°	16779.2	14378.8	9897.4	6457.5	4074.3	2349.0	1626.7	1371.7	1219.5	1142.3	1110.2
27.5°	18624.5	15784.8	10274.6	6058.9	3364.8	1873.2	1393.1	1174.5	1065.2	1011.6	981.6
30°	20146.2	17413.6	10656.1	5615.2	2850.5	1633.1	1275.2	1071.6	945.2	910.9	883.0
32.5°	21477.2	18646.0	10926.1	5214.4	2514.0	1451.0	1153.0	958.0	872.3	805.8	775.8
35°	22855.3	19672.6	10917.5	4933.7	2282.5	1313.8	1050.2	857.3	754.4	677.3	653.7
37.5°	24346.9	20832.1	10731.1	4693.6	2181.8	1204.5	992.3	803.7	700.8	623.7	593.7
40°	26093.6	22049.4	10540.3	4468.6	2153.9	1116.6	951.6	760.8	651.5	576.5	546.5
42.5°	27795.4	23146.7	10373.2	4301.4	2033.9	1114.5	915.2	728.7	613.0	540.1	505.8
45°	29156.3	24169.0	10341.0	4200.7	1907.5	1153.0	895.9	707.3	583.0	510.1	477.9
47.5°	30287.9	25279.2	10546.8	4130.0	1787.4	1052.3	943.0	692.3	555.1	484.4	447.9
50°	31633.9	26642.3	11031.1	4014.2	1661.0	947.3	1080.2	696.5	531.5	458.6	420.1
52.5°	33511.3	28528.3	11742.7	3819.2	1487.4	850.9	1063.0	700.8	505.8	430.8	392.2
55°	35616.0	30883.7	12507.8	3495.6	1245.2	724.4	910.9	670.8	456.5	400.8	364.3
57.5°	37827.8	33020.5	12962.2	3109.8	990.2	625.8	728.7	610.8	402.9	360.1	336.5
60°	38175.0	33832.8	12754.3	2636.2	786.6	544.4	540.1	621.5	360.1	317.2	300.1
62.5°	37311.2	32812.6	11749.1	2213.9	658.0	477.9	443.6	542.2	325.8	282.9	265.8
65°	35650.2	30054.3	10120.3	1995.3	610.8	409.4	368.6	381.5	285.0	246.5	231.5
67.5°	33339.9	26372.3	8309.2	1871.0	604.4	351.5	315.1	289.3	246.5	214.3	201.5
70°	28616.2	21970.1	6629.0	1802.4	587.2	295.8	265.8	235.8	205.7	182.2	171.5
72.5°	21061.4	15568.3	5156.6	1727.4	591.5	235.8	231.5	195.0	165.0	141.5	137.2
75°	12169.2	8894.3	3382.0	1399.5	563.7	182.2	192.9	137.2	115.7	98.6	98.6
77.5°	6485.4	5424.5	1288.1	583.0	205.7	115.7	109.3	81.4	72.9	60.0	57.9
80°	2826.9	2387.5	387.9	162.9	113.6	62.2	40.7	36.4	32.1	25.7	23.6
82.5°	1000.9	863.7	126.4	79.3	49.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	227.2	162.9	0.0	19.3	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°	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3
2.5°	12874.3	12827.1	12548.5	12559.2	12608.5	12679.3	12512.1	12589.2	12797.1	12996.5	13071.5
5°	9955.2	9966.0	9796.6	9901.7	9996.0	10060.3	9790.2	9794.5	9959.5	10184.6	10302.4
7.5°	7014.7	6997.6	7006.2	7256.9	7434.8	7306.2	7407.0	7057.6	7079.0	7239.8	7119.8
10°	5214.4	4978.7	4845.8	5034.4	5229.4	5158.7	4985.1	4871.5	4950.8	5128.7	5115.9
12.5°	4097.8	3759.2	3559.9	3424.9	3585.6	3452.7	3448.4	3349.8	3242.7	3262.0	3547.0
15°	3081.9	2835.5	2599.7	2383.3	2379.0	2334.0	2104.6	1847.5	1826.0	1838.9	1986.8
17.5°	2119.6	2036.1	1939.6	1753.2	1703.9	1515.3	1292.4	1189.5	1138.0	1161.6	1210.9
20°	1489.5	1457.4	1468.1	1367.4	1296.6	1116.6	985.9	945.2	936.6	960.2	983.7
22.5°	1234.5	1176.6	1170.2	1125.2	1054.5	923.7	853.0	829.4	818.7	840.1	857.3
25°	1080.2	1022.3	998.7	970.9	895.9	805.8	763.0	741.6	730.8	743.7	754.4
27.5°	951.6	898.0	876.6	857.3	784.4	720.1	685.8	666.5	658.0	662.3	673.0
30°	855.1	808.0	780.1	756.6	694.4	649.4	619.4	600.1	591.5	591.5	602.2
32.5°	754.4	728.7	703.0	673.0	615.1	585.1	555.1	533.7	525.1	527.2	535.8
35°	628.0	619.4	625.8	598.0	548.7	522.9	492.9	469.4	462.9	465.1	473.7
37.5°	557.2	518.7	542.2	527.2	499.4	465.1	426.5	405.1	394.4	400.8	405.1
40°	512.2	465.1	447.9	462.9	458.6	402.9	368.6	347.2	338.6	340.8	345.1
42.5°	473.7	417.9	379.3	377.2	402.9	351.5	315.1	295.8	285.0	285.0	289.3
45°	437.2	377.2	330.1	293.6	338.6	297.9	263.6	246.5	233.6	233.6	235.8
47.5°	409.4	342.9	287.2	240.0	255.0	244.3	216.5	199.3	186.5	186.5	188.6
50°	383.6	308.6	248.6	201.5	190.7	201.5	175.7	156.5	147.9	145.7	150.0
52.5°	355.8	274.3	212.2	171.5	150.0	152.2	137.2	124.3	113.6	113.6	117.9
55°	327.9	246.5	184.3	145.7	124.3	113.6	109.3	100.7	92.2	92.2	96.4
57.5°	300.1	216.5	156.5	120.0	98.6	90.0	90.0	83.6	77.2	77.2	81.4
60°	274.3	186.5	128.6	98.6	77.2	75.0	77.2	70.7	66.4	66.4	70.7
62.5°	244.3	158.6	105.0	81.4	62.2	60.0	66.4	62.2	57.9	57.9	62.2
65°	207.9	135.0	83.6	62.2	47.2	47.2	55.7	51.4	47.2	47.2	51.4
67.5°	175.7	113.6	64.3	45.0	34.3	36.4	47.2	42.9	40.7	40.7	45.0
70°	145.7	87.9	45.0	27.9	19.3	27.9	36.4	36.4	36.4	36.4	40.7
72.5°	109.3	60.0	25.7	10.7	8.6	19.3	30.0	34.3	32.1	32.1	38.6
75°	70.7	34.3	8.6	0.0	0.0	10.7	23.6	27.9	27.9	25.7	32.1
77.5°	40.7	10.7	0.0	0.0	0.0	0.0	15.0	12.9	10.7	8.6	15.0
80°	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

REPORT NUMBER: P324344

CATALOG NUMBER: GLEON-SA0D-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3	15178.3
2.5°	13373.7	13626.6	13982.3	14359.5	14940.4	15401.1	15853.4	16241.3	16391.3	16453.5
5°	10585.3	10956.1	11476.9	12145.6	13193.6	14136.6	15092.5	16054.8	16472.8	16577.8
7.5°	7595.6	8069.2	8731.5	9569.5	10797.5	12019.2	13354.4	14766.8	15414.0	15576.9
10°	5621.7	6200.3	6959.0	7842.0	9014.4	10270.3	11725.5	13339.4	14078.8	14295.2
12.5°	3988.5	4770.8	5786.7	6860.4	7876.3	8997.2	10469.6	12248.5	13024.3	13257.9
15°	2342.5	3099.1	4301.4	5739.5	7040.5	8176.4	9672.3	11689.1	12544.2	12780.0
17.5°	1343.8	1721.0	2629.7	4232.9	5998.9	7572.0	9421.6	11828.4	12835.7	13054.3
20°	1026.6	1146.6	1515.3	2726.2	4781.5	6978.3	9421.6	12617.1	13858.0	14179.5
22.5°	898.0	985.9	1135.9	1626.7	3519.2	6341.8	9530.9	13757.3	15379.7	15735.5
25°	797.3	876.6	1005.2	1223.8	2400.4	5585.2	9790.2	15156.8	17171.4	17632.2
27.5°	713.7	788.7	904.4	1071.6	1641.7	4672.2	10139.6	16798.5	19147.5	19516.1
30°	638.7	709.4	814.4	932.3	1266.6	3637.0	10437.5	18345.9	20699.2	21095.7
32.5°	568.0	632.2	726.6	814.4	1037.3	2689.7	10469.6	19571.8	21987.2	22381.6
35°	501.5	559.4	645.1	713.7	859.4	2123.9	9970.2	20634.9	23275.3	23796.1
37.5°	437.2	492.9	568.0	619.4	756.6	1731.7	9207.3	21820.1	24927.7	25410.0
40°	377.2	426.5	503.7	537.9	715.8	1330.9	8377.8	23063.1	26548.0	26989.5
42.5°	321.5	368.6	443.6	510.1	628.0	994.5	7482.0	24229.1	28005.4	28468.3
45°	267.9	317.2	392.2	540.1	520.8	743.7	6523.9	25002.8	29156.3	29660.0
47.5°	216.5	272.2	375.1	514.4	415.8	546.5	5765.2	25735.7	30028.6	30525.8
50°	173.6	229.3	422.2	458.6	340.8	417.9	5448.1	26391.6	30600.8	31078.8
52.5°	141.5	192.9	398.6	351.5	285.0	345.1	5619.5	27454.6	31130.2	31430.3
55°	117.9	152.2	240.0	244.3	242.2	293.6	5831.7	28980.6	32499.7	32641.2
57.5°	102.9	122.2	167.2	188.6	203.6	261.5	5836.0	31170.9	34619.4	34707.2
60°	87.9	107.2	139.3	152.2	175.7	233.6	5623.8	31936.1	35453.1	35744.5
62.5°	77.2	94.3	115.7	126.4	147.9	210.0	5126.6	30828.0	34308.6	34803.7
65°	68.6	85.7	96.4	107.2	130.7	188.6	4307.9	28611.9	32409.7	32926.2
67.5°	60.0	75.0	85.7	96.4	117.9	167.2	3172.0	26037.9	30230.1	30658.7
70°	53.6	66.4	77.2	85.7	102.9	141.5	1924.6	22094.4	27216.7	27394.6
72.5°	51.4	60.0	70.7	77.2	90.0	124.3	975.2	16237.0	21757.9	22047.3
75°	45.0	53.6	64.3	68.6	79.3	107.2	396.5	10664.6	15767.6	16232.7
77.5°	36.4	49.3	57.9	62.2	68.6	87.9	201.5	6815.4	11065.4	11365.5
80°	12.9	36.4	49.3	51.4	57.9	64.3	132.9	3731.3	6418.9	6547.5
82.5°	0.0	23.6	38.6	36.4	40.7	49.3	85.7	1774.6	4237.1	4284.3
85°	0.0	10.7	30.0	23.6	17.1	34.3	30.0	387.9	2222.5	2314.7
87.5°	0.0	0.0	2.1	10.7	8.6	12.9	4.3	2.1	201.5	255.0
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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /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			

REPORT NUMBER: SP1-2408-195-9

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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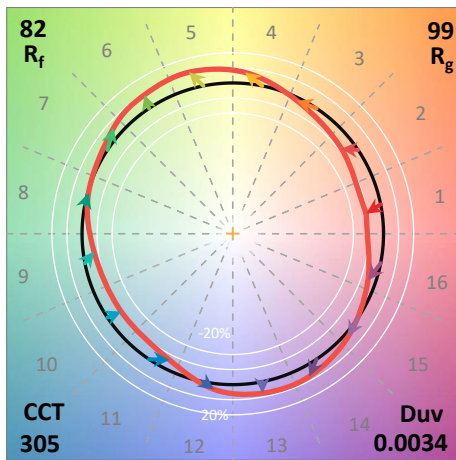
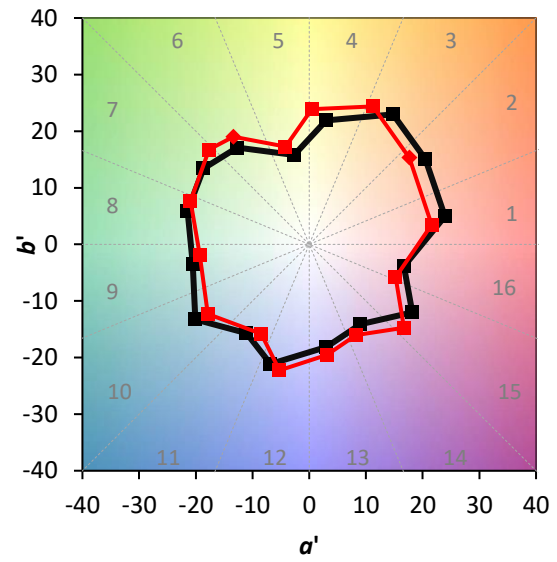
TM-30-18

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)