

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: P320147

Luminaire Tested: **GLEON-SA3A-830-U-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P320147
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA3A-830-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10743 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

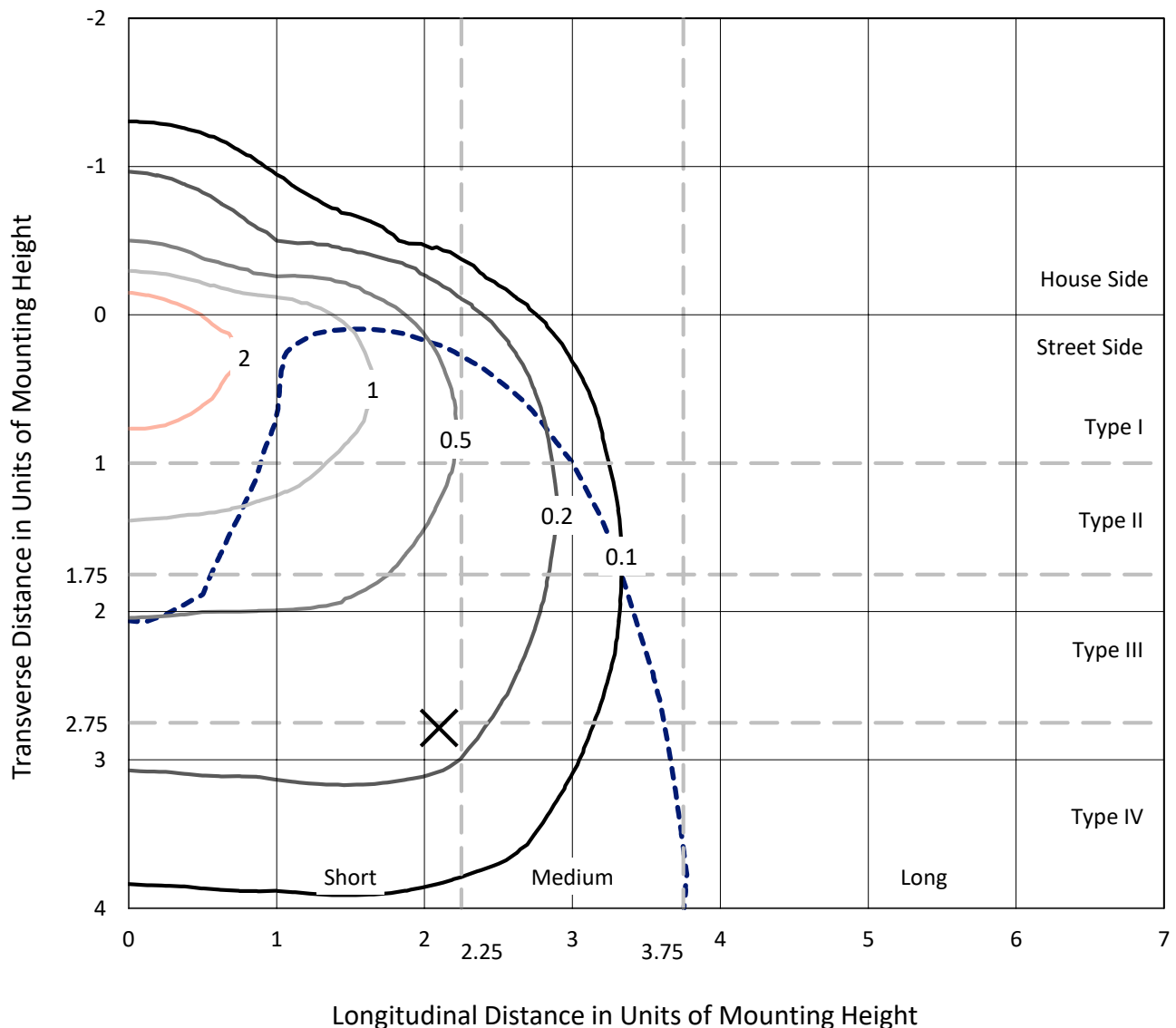
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

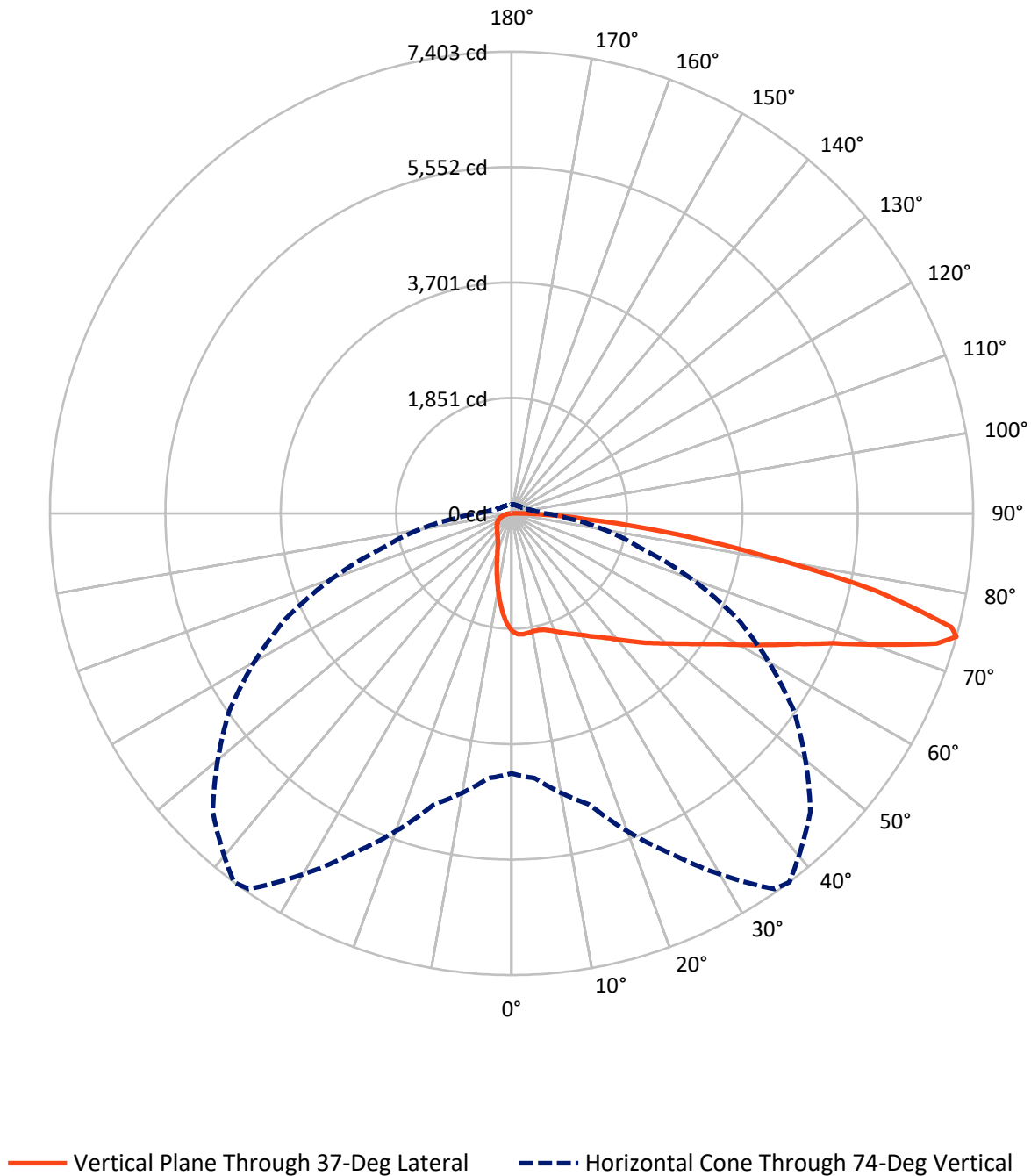
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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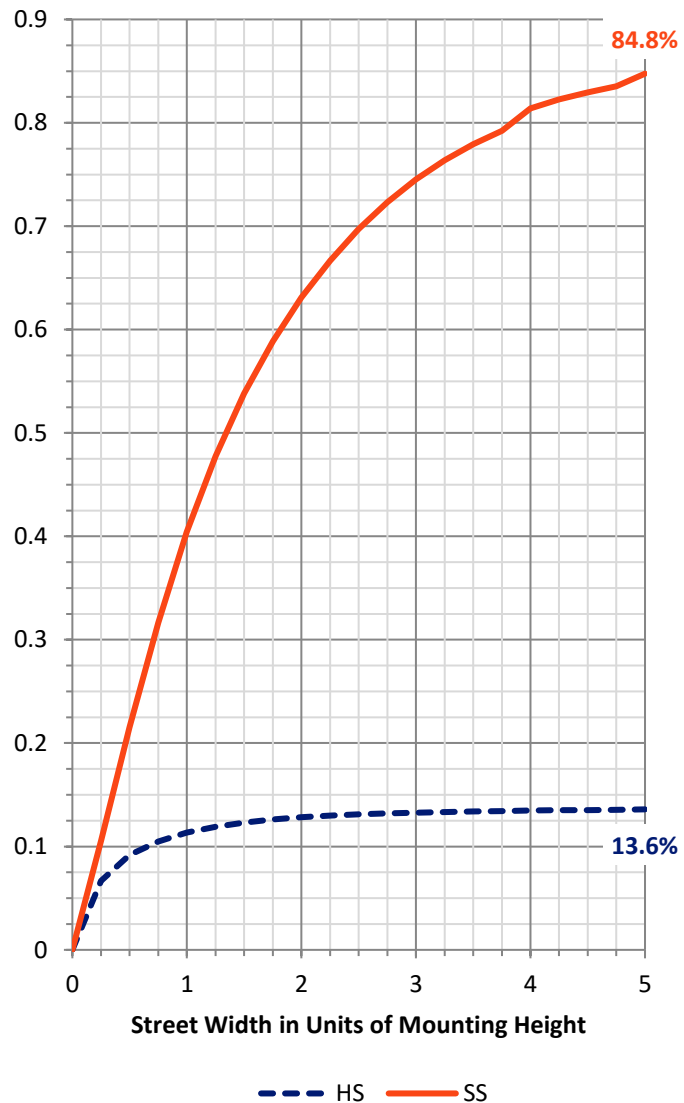
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1478.2	0.0	1478.2
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	9264.8	0.0	9264.8
	% Fixture	86.2	0.0	86.2
Total	Lumens	10743.0	0.0	10743.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.7	1.6
10°-20°	427.3	4.0
20°-30°	658.3	6.1
30°-40°	957.3	8.9
40°-50°	1409.0	13.1
50°-60°	1978.7	18.4
60°-70°	2504.4	23.3
70°-80°	2205.2	20.5
80°-90°	436.0	4.1
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°	10743.0	100.0
0°-180°	10743.0	100.0

Coefficient of Utilization



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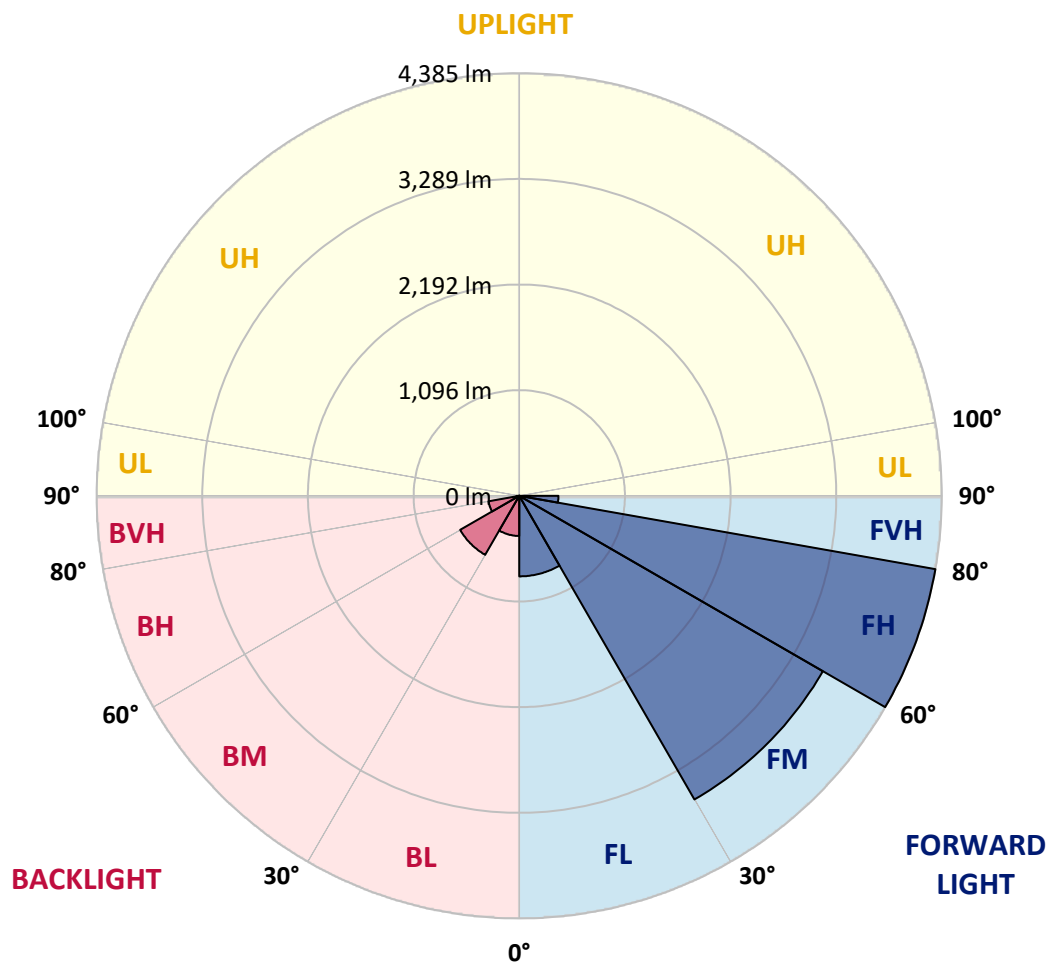
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	835.9	7.8			
FM	(30°-60°)	3637.7	33.9			
FH	(60°-80°)	4384.7	40.8			G2/5000
FVH	(80°-90°)	406.5	3.8			G3/500
BL	(0°-30°)	416.4	3.9	B1/500		
BM	(30°-60°)	707.4	6.6	B1/1000		
BH	(60°-80°)	324.9	3.0	B1/500		G1/500
BVH	(80°-90°)	29.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9
2.5°	1957.6	1958.0	1957.6	1954.6	1947.4	1941.3	1936.4	1929.2	1913.3	1901.2	1883.0
5°	1976.1	1973.9	1972.3	1966.7	1955.3	1948.5	1939.0	1925.4	1899.3	1875.1	1845.6
7.5°	1967.4	1964.8	1961.4	1954.6	1941.7	1936.0	1922.8	1905.0	1873.6	1841.8	1799.4
10°	1940.6	1939.8	1938.3	1936.8	1925.8	1921.3	1909.1	1890.2	1859.2	1820.6	1771.0
12.5°	1910.7	1912.6	1918.6	1926.6	1921.6	1919.4	1911.8	1898.9	1867.1	1825.5	1765.7
15°	1891.7	1897.0	1913.3	1934.1	1938.3	1937.5	1935.6	1927.3	1893.6	1847.5	1777.8
17.5°	1885.3	1894.0	1925.0	1959.5	1971.6	1974.2	1975.0	1960.6	1923.1	1874.3	1790.3
20°	1897.0	1908.0	1953.4	2000.7	2020.0	2021.5	2018.1	1993.2	1951.2	1897.4	1797.1
22.5°	1932.6	1942.4	1999.2	2052.6	2074.5	2076.8	2066.6	2028.7	1980.7	1924.7	1806.6
25°	2001.1	2013.2	2070.0	2123.3	2134.7	2135.1	2120.3	2073.4	2019.3	1962.9	1827.0
27.5°	2090.4	2102.5	2153.6	2205.8	2199.8	2196.4	2176.3	2129.4	2069.6	2015.5	1863.4
30°	2189.9	2203.2	2251.6	2288.7	2274.3	2267.5	2251.2	2190.7	2139.6	2087.4	1919.0
32.5°	2292.9	2305.0	2347.4	2372.7	2354.6	2351.5	2326.9	2271.7	2230.8	2197.1	2009.1
35°	2398.4	2407.2	2448.8	2463.2	2438.9	2438.2	2431.4	2380.7	2354.9	2370.8	2140.0
37.5°	2506.3	2508.6	2544.1	2544.9	2537.7	2540.7	2547.9	2516.1	2523.3	2572.9	2310.3
40°	2602.4	2608.5	2634.2	2642.2	2654.6	2665.2	2701.2	2680.4	2736.0	2823.8	2522.2
42.5°	2673.6	2685.3	2726.5	2747.0	2787.5	2804.1	2854.8	2874.1	2986.1	3117.8	2774.2
45°	2733.7	2751.9	2818.1	2860.1	2928.6	2957.8	3030.4	3095.1	3268.8	3436.8	3039.5
47.5°	2798.8	2821.9	2904.8	2985.0	3078.1	3111.0	3243.1	3340.0	3570.4	3757.7	3289.6
50°	2894.6	2912.3	2993.3	3119.3	3235.5	3277.9	3460.7	3599.6	3877.0	4063.5	3506.5
52.5°	3028.1	3021.3	3089.8	3266.6	3422.5	3474.7	3693.0	3875.8	4187.6	4340.1	3689.6
55°	3162.5	3151.1	3199.2	3420.6	3640.4	3695.3	3948.9	4153.2	4483.2	4589.1	3830.0
57.5°	3312.0	3290.4	3330.9	3594.3	3888.7	3954.1	4235.3	4448.0	4773.8	4790.5	3919.3
60°	3466.0	3436.8	3482.3	3809.6	4203.9	4281.1	4570.6	4735.6	5047.8	4951.7	3948.1
62.5°	3600.7	3580.3	3650.3	4049.9	4559.2	4644.0	4899.8	5041.4	5318.0	5018.7	3844.4
65°	3718.4	3721.8	3842.9	4320.1	4955.5	5045.9	5277.5	5418.3	5530.7	4978.9	3601.8
67.5°	3858.8	3878.1	4084.7	4675.8	5454.2	5553.4	5827.0	5829.2	5649.5	4745.8	3124.3
70°	4063.5	4103.2	4417.3	5169.3	6163.4	6299.6	6510.8	6070.7	5482.6	4113.8	2458.2
72.5°	4245.2	4319.3	4771.2	5733.9	7027.7	7131.0	6910.8	5931.4	4785.2	3083.0	1531.5
74°	4171.4	4263.3	4835.5	6012.0	7353.1	7402.7	6775.7	5525.0	3989.7	2135.1	890.1
75°	4012.4	4112.3	4741.6	6009.4	7311.9	7284.3	6449.5	5060.7	3285.9	1456.2	592.2
77.5°	3238.2	3343.8	3995.4	5150.3	5995.4	5969.3	4954.3	3394.8	1439.1	477.6	300.8
80°	1882.7	1963.3	2480.2	3270.7	4042.7	4090.0	3258.2	1679.8	566.1	268.3	204.0
82.5°	836.3	891.9	1198.1	1669.6	2439.7	2500.6	1706.3	880.2	349.7	163.1	122.6
85°	548.7	590.0	727.3	795.1	1161.8	1203.4	835.2	685.3	230.8	89.7	90.1
87.5°	394.7	434.4	540.4	471.9	533.2	504.8	454.5	634.2	92.7	51.1	30.3
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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CATALOG NUMBER: GLEON-SA3A-830-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9	1892.9
2.5°	1875.1	1869.0	1855.4	1829.7	1815.3	1803.2	1783.1	1771.4	1766.1	1765.7	1768.0
5°	1828.5	1814.5	1779.3	1736.2	1701.8	1670.4	1631.4	1607.9	1591.3	1581.4	1584.1
7.5°	1774.4	1752.5	1697.2	1628.4	1573.1	1512.2	1452.0	1416.1	1388.1	1367.2	1371.0
10°	1737.3	1707.1	1626.5	1527.3	1435.4	1346.8	1263.9	1214.4	1175.0	1144.7	1147.0
12.5°	1724.9	1684.0	1572.4	1439.9	1310.9	1189.8	1081.5	1005.5	965.0	930.5	933.2
15°	1726.7	1671.9	1526.9	1361.2	1198.8	1046.3	915.0	826.1	771.2	747.4	747.8
17.5°	1728.3	1657.9	1479.3	1276.8	1088.0	912.4	769.7	679.6	627.8	605.9	606.2
20°	1723.3	1635.2	1420.2	1179.9	972.2	789.4	651.3	574.8	535.5	518.4	518.4
22.5°	1716.9	1608.3	1353.6	1082.7	857.9	682.7	566.5	508.2	485.5	474.2	473.8
25°	1719.9	1588.2	1285.5	982.8	752.7	597.5	510.1	471.5	456.4	449.2	448.8
27.5°	1736.2	1578.8	1222.7	883.2	660.7	533.6	472.3	445.0	435.2	430.6	430.6
30°	1765.7	1578.8	1157.2	798.5	584.3	486.3	443.1	424.6	417.8	414.8	414.8
32.5°	1817.2	1587.5	1094.0	714.5	523.4	449.2	418.9	406.4	401.1	399.6	399.6
35°	1905.7	1617.0	1032.3	635.0	474.2	418.9	395.8	388.6	384.9	384.5	385.6
37.5°	2030.2	1677.2	974.4	576.3	439.3	394.3	376.5	370.9	368.6	370.5	372.0
40°	2186.9	1758.9	921.8	523.4	412.9	374.6	358.7	355.0	353.8	356.5	358.7
42.5°	2376.1	1869.4	878.7	485.1	392.4	358.0	343.6	339.1	337.9	341.0	344.0
45°	2580.8	1988.2	848.4	456.8	376.5	345.5	330.4	325.4	323.2	324.7	328.1
47.5°	2767.0	2100.6	836.3	436.7	361.4	334.9	318.6	312.6	308.8	308.0	310.7
50°	2924.1	2184.3	842.0	424.6	349.3	323.2	307.3	300.5	294.8	291.4	293.3
52.5°	3038.4	2236.9	847.3	419.3	339.8	310.3	294.8	288.4	280.8	275.1	275.1
55°	3121.2	2249.0	835.6	415.1	332.6	296.3	280.8	274.7	267.2	260.7	260.0
57.5°	3153.8	2214.9	792.0	409.1	327.7	283.1	266.0	261.5	255.1	247.5	247.1
60°	3109.9	2109.7	708.0	396.2	321.3	272.1	251.3	248.2	245.2	238.0	237.7
62.5°	2933.5	1878.9	599.4	370.1	308.4	260.4	237.7	239.2	239.5	234.6	233.9
65°	2613.8	1561.8	493.5	336.0	289.1	246.4	223.6	230.8	235.0	234.2	233.1
67.5°	2149.1	1215.5	418.2	300.1	263.8	227.1	208.5	216.8	220.2	222.9	222.1
70°	1595.1	857.1	345.9	262.2	233.1	204.3	188.8	193.0	190.7	193.8	194.9
72.5°	889.3	514.3	281.9	224.4	201.3	177.9	166.9	166.1	161.2	161.2	161.2
74°	533.6	377.3	247.9	200.9	182.0	160.5	151.0	147.6	143.0	143.4	143.0
75°	429.1	324.3	227.4	185.4	168.4	150.2	140.8	136.2	132.8	132.8	132.4
77.5°	271.0	246.4	183.2	147.6	134.7	123.7	117.3	111.3	111.3	110.9	110.5
80°	204.7	196.0	142.7	111.6	103.3	95.0	90.8	88.2	88.2	89.3	88.9
82.5°	140.4	147.6	100.3	78.0	73.8	67.7	67.0	67.4	66.2	64.7	64.3
85°	102.6	110.9	67.7	49.2	45.0	41.2	44.3	45.8	43.9	40.5	39.0
87.5°	39.4	72.7	36.3	20.4	18.9	16.3	18.9	19.7	21.2	16.7	17.0
90°	0.0	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 ^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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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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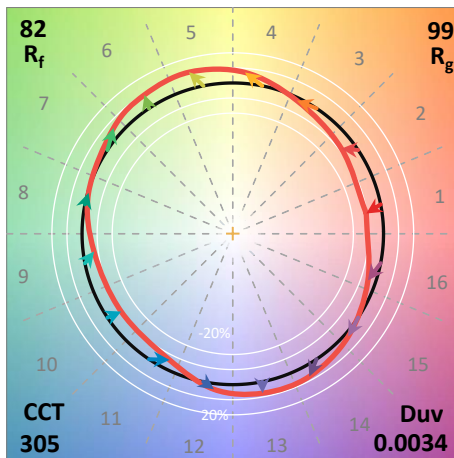
TM-30-18

Summary

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



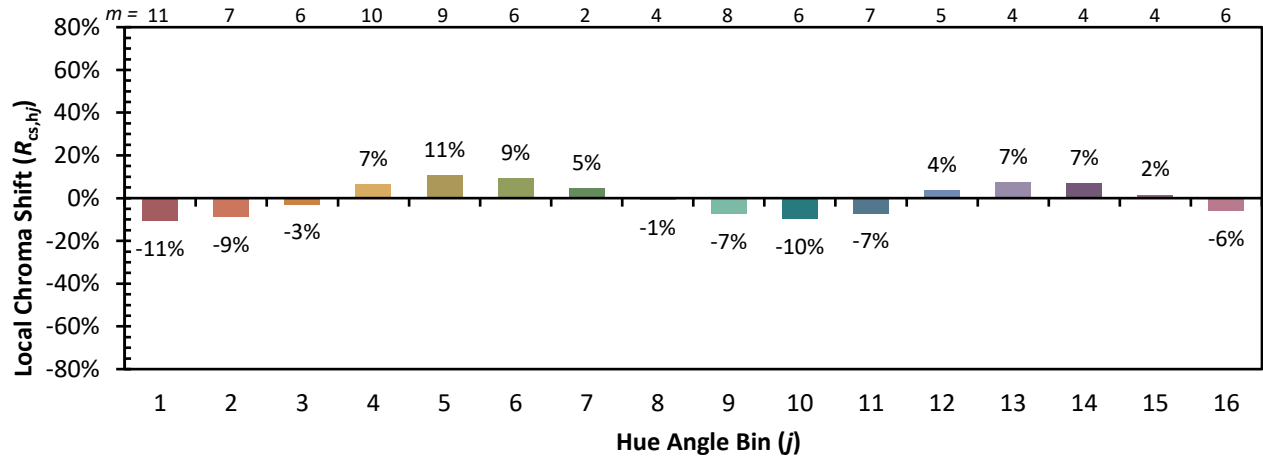
Color Vector Graphics

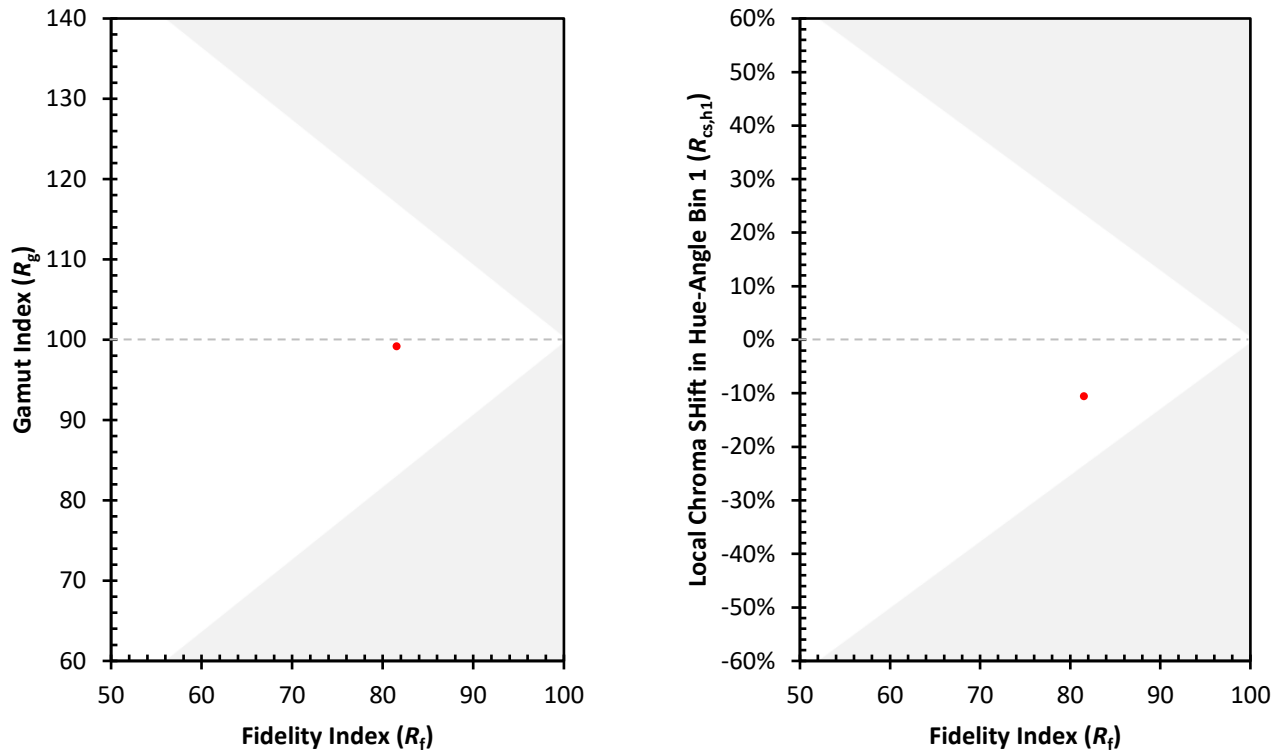


Individual Sample Fidelity Index ($R_{f,i}$)

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)