

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: METALUX

Report Number: P292707

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-A19/156-UNV-L92765-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3787.0 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

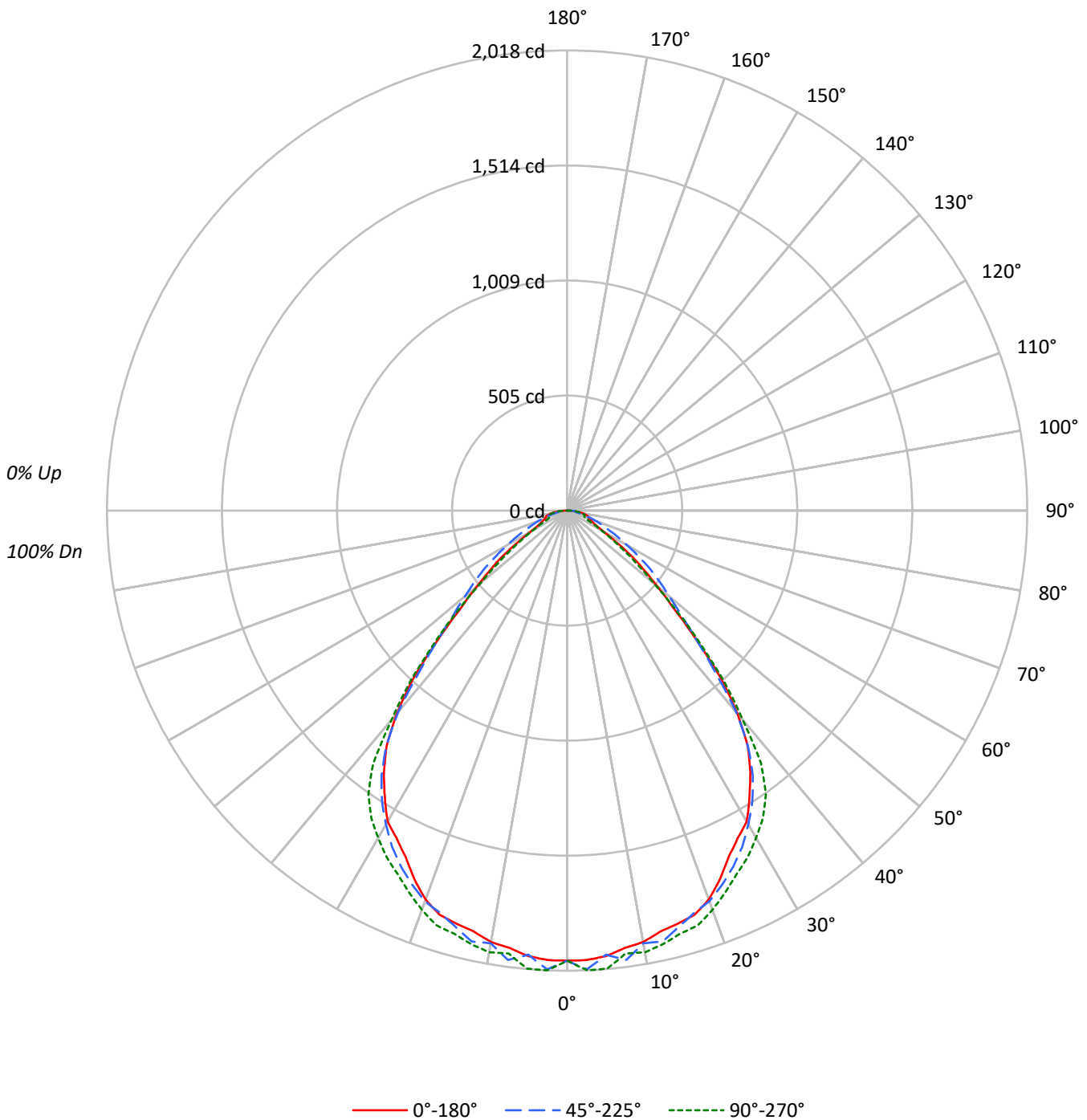
Input Watts (W): 35.526
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96		97	95	93		93	91	90	88
2	103	96	90	85	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	79	73	82	77	72		79	75	71		77	73	70	68
4	88	78	71	65	86	77	70	64	75	68	64		72	67	63		70	66	62	60
5	82	71	63	58	80	70	63	57	68	62	57		66	61	56		64	59	56	54
6	77	65	57	51	75	64	57	51	62	56	51		61	55	50		59	54	50	48
7	72	60	52	46	70	59	51	46	57	51	46		56	50	46		55	49	45	44
8	67	55	47	42	66	54	47	42	53	46	42		52	46	41		51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38		48	42	38		47	42	38	36
10	59	47	40	35	58	47	40	35	46	39	35		45	39	35		44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5311	5311	5311
5°	5298	5281	5447
10°	5249	5264	5373
15°	5225	5265	5349
20°	5197	5223	5335
25°	4975	5116	5222
30°	4893	4938	5148
35°	4602	4661	4992
40°	4078	4050	4209
45°	3046	3052	3137
50°	2144	2439	2077
55°	1582	2060	1419
60°	989	1628	927
65°	807	1289	648
70°	800	1074	639
75°	993	788	826
80°	1106	623	1009
85°	1102	1158	1130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.9	5.0
10°-20°	535.2	14.1
20°-30°	792.6	20.9
30°-40°	887.8	23.4
40°-50°	652.4	17.2
50°-60°	364.6	9.6
60°-70°	203.2	5.4
70°-80°	119.4	3.2
80°-90°	43.9	1.2
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°-30°	1515.6	40.0
0°-40°	2403.5	63.5
0°-60°	3420.5	90.3
0°-90°	3787.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3787.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1974	1974	1974	1974	1974	
5°	1961	1998	1955	1995	2016	186
15°	1876	1887	1890	1918	1920	530
25°	1676	1689	1723	1747	1759	777
35°	1401	1402	1419	1483	1520	868
45°	800	866	802	859	824	625
55°	337	410	439	438	302	301
65°	127	225	202	260	102	131
75°	96	135	76	153	79	96
85°	36	53	38	48	37	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1973.7	1973.7	1973.7	1973.7	1973.7
2.5°	1972.8	1990.6	2013.8	2016.5	2018.3
5°	1961.2	1997.8	1954.9	1995.1	2016.5
7.5°	1934.4	1956.7	1988.0	1947.8	1959.4
10°	1921.0	1926.4	1926.4	1976.4	1966.5
12.5°	1890.7	1926.4	1935.3	1925.5	1946.9
15°	1875.5	1887.1	1889.8	1918.4	1920.1
17.5°	1858.6	1855.9	1849.7	1870.2	1906.8
20°	1814.9	1805.0	1823.8	1848.8	1863.0
22.5°	1750.6	1753.3	1775.6	1796.1	1812.2
25°	1675.7	1689.0	1723.0	1747.0	1758.6
27.5°	1619.5	1639.1	1662.3	1690.8	1714.0
30°	1574.8	1573.1	1589.1	1630.2	1656.9
32.5°	1488.3	1494.5	1511.5	1560.6	1598.0
35°	1400.8	1401.7	1418.7	1482.9	1519.5
37.5°	1300.0	1292.9	1302.7	1372.3	1396.4
40°	1160.8	1162.6	1152.8	1201.9	1198.3
42.5°	998.4	1012.7	961.9	1026.1	1021.6
45°	800.4	865.5	802.1	859.2	824.4
47.5°	631.7	728.1	675.4	717.4	652.2
50°	512.2	611.2	582.6	601.4	496.1
52.5°	420.3	500.6	509.5	513.9	387.2
55°	337.3	410.4	439.0	438.1	302.5
57.5°	248.9	333.7	366.7	380.1	229.3
60°	183.8	277.5	302.5	331.9	172.2
62.5°	148.1	243.6	249.8	290.9	131.2
65°	126.7	224.8	202.5	259.6	101.7
67.5°	112.4	209.7	165.1	232.0	86.5
70°	101.7	186.5	136.5	207.9	81.2
72.5°	99.0	158.8	105.3	185.6	80.3
75°	95.5	134.7	75.8	152.6	79.4
77.5°	82.1	115.1	54.4	117.8	74.1
80°	71.4	91.9	40.2	88.3	65.1
82.5°	55.3	69.6	35.7	66.9	52.6
85°	35.7	52.6	37.5	48.2	36.6
87.5°	17.0	29.4	26.8	25.9	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)