

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: P292545

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292545
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-LD5-40-A19/156-UNV-L83050-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4257.0 lumens
Efficiency: N/A
Efficacy: 125.4 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

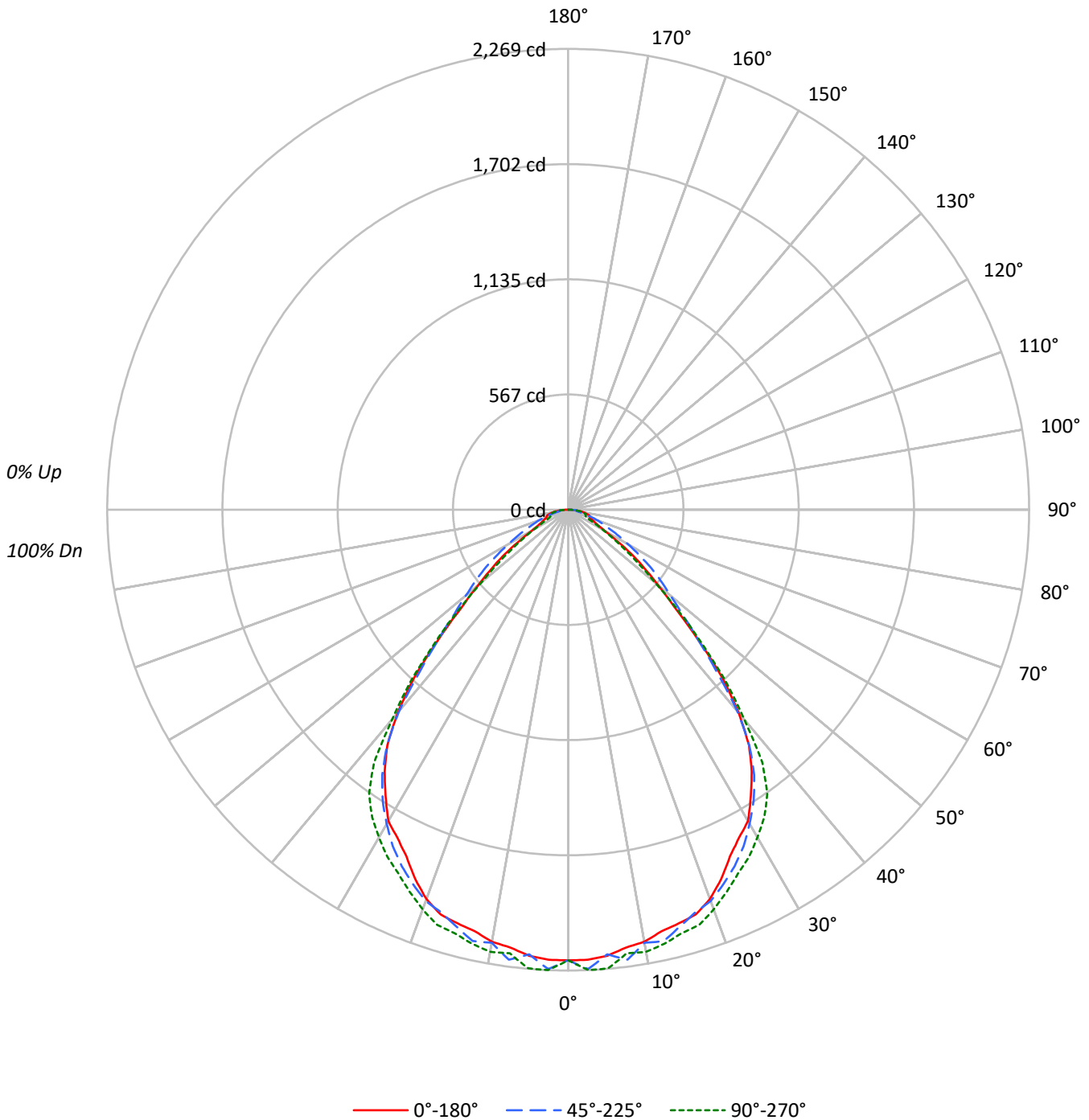
Input Watts (W): 33.945
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5970	5970	5970
5°	5955	5936	6123
10°	5901	5917	6040
15°	5874	5918	6013
20°	5842	5871	5997
25°	5593	5751	5870
30°	5501	5551	5788
35°	5173	5239	5611
40°	4584	4552	4732
45°	3424	3432	3527
50°	2410	2742	2335
55°	1779	2315	1595
60°	1112	1830	1042
65°	907	1450	728
70°	899	1208	718
75°	1116	887	928
80°	1243	699	1134
85°	1238	1300	1269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.2	5.0
10°-20°	601.6	14.1
20°-30°	891.0	20.9
30°-40°	998.0	23.4
40°-50°	733.3	17.2
50°-60°	409.9	9.6
60°-70°	228.5	5.4
70°-80°	134.2	3.2
80°-90°	49.3	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°	1703.8	40.0
0°-40°	2701.8	63.5
0°-60°	3845.0	90.3
0°-90°	4257.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4257.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2219	2219	2219	2219	2219	
5°	2205	2246	2198	2243	2267	209
15°	2108	2121	2124	2156	2158	595
25°	1884	1899	1937	1964	1977	873
35°	1575	1576	1595	1667	1708	976
45°	900	973	902	966	927	703
55°	379	461	494	492	340	338
65°	142	253	228	292	114	147
75°	107	152	85	172	89	108
85°	40	59	42	54	41	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2218.6	2218.6	2218.6	2218.6	2218.6
2.5°	2217.6	2237.7	2263.8	2266.8	2268.8
5°	2204.6	2245.7	2197.6	2242.7	2266.8
7.5°	2174.5	2199.6	2234.7	2189.5	2202.6
10°	2159.5	2165.5	2165.5	2221.6	2210.6
12.5°	2125.4	2165.5	2175.5	2164.5	2188.5
15°	2108.3	2121.3	2124.3	2156.4	2158.5
17.5°	2089.2	2086.2	2079.2	2102.3	2143.4
20°	2040.1	2029.1	2050.1	2078.2	2094.3
22.5°	1967.9	1970.9	1996.0	2019.0	2037.1
25°	1883.6	1898.7	1936.8	1963.9	1976.9
27.5°	1820.4	1842.5	1868.6	1900.7	1926.8
30°	1770.3	1768.3	1786.3	1832.5	1862.6
32.5°	1673.0	1680.0	1699.1	1754.2	1796.4
35°	1574.7	1575.7	1594.8	1667.0	1708.1
37.5°	1461.4	1453.3	1464.4	1542.6	1569.7
40°	1304.9	1306.9	1295.9	1351.0	1347.0
42.5°	1122.4	1138.4	1081.2	1153.4	1148.4
45°	899.7	972.9	901.7	965.9	926.8
47.5°	710.1	818.4	759.3	806.4	733.2
50°	575.7	687.1	655.0	676.0	557.7
52.5°	472.4	562.7	572.7	577.7	435.3
55°	379.1	461.4	493.5	492.5	340.0
57.5°	279.8	375.1	412.2	427.3	257.8
60°	206.6	311.9	340.0	373.1	193.6
62.5°	166.5	273.8	280.8	327.0	147.4
65°	142.4	252.8	227.7	291.9	114.3
67.5°	126.4	235.7	185.6	260.8	97.3
70°	114.3	209.6	153.5	233.7	91.3
72.5°	111.3	178.5	118.4	208.6	90.3
75°	107.3	151.5	85.3	171.5	89.3
77.5°	92.3	129.4	61.2	132.4	83.2
80°	80.2	103.3	45.1	99.3	73.2
82.5°	62.2	78.2	40.1	75.2	59.2
85°	40.1	59.2	42.1	54.2	41.1
87.5°	19.1	33.1	30.1	29.1	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)