

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: P291438

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291438
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-6500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4434.0 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

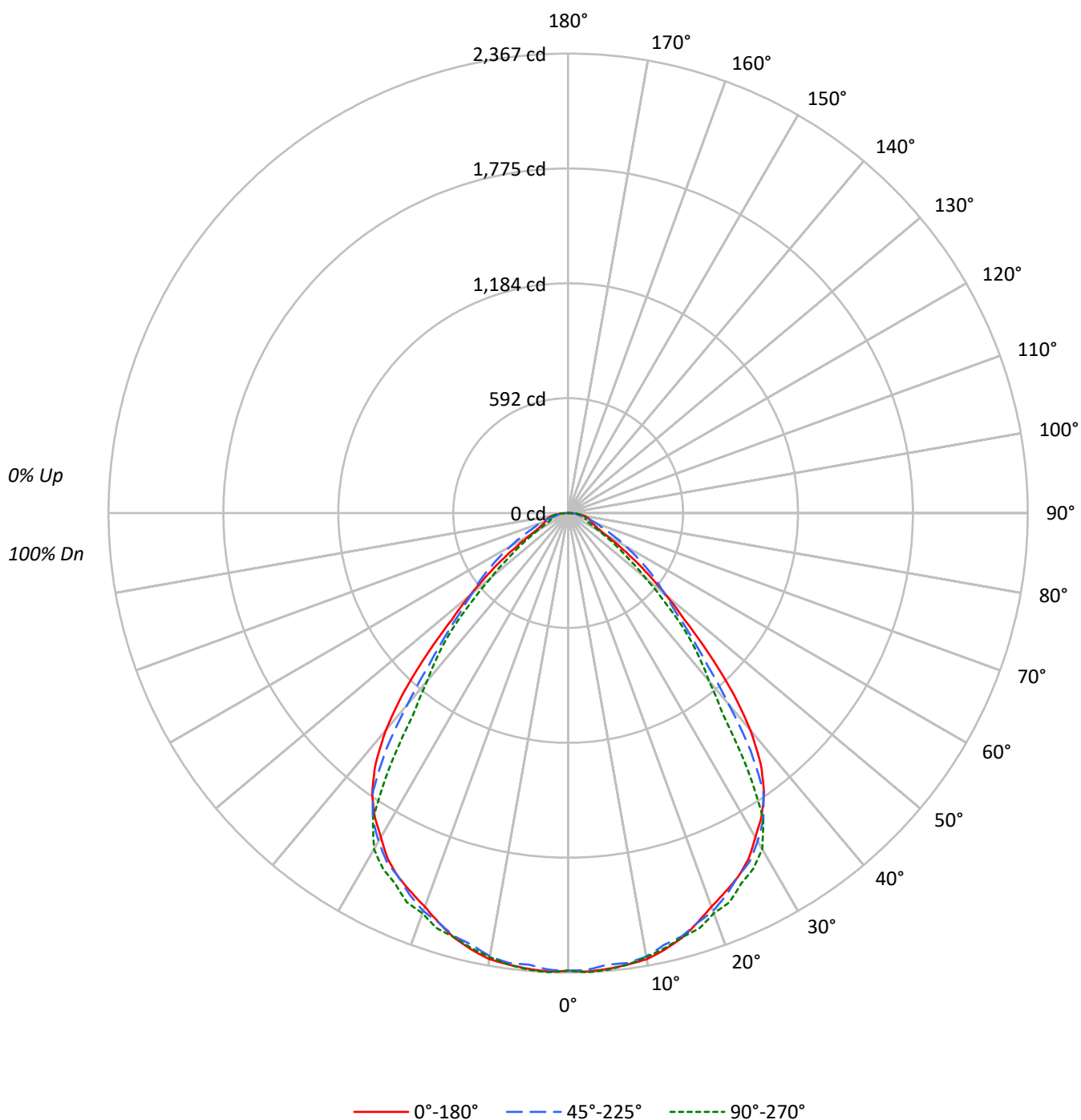
Input Watts (W): 38.13
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77		
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68		
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61		
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54		
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49		
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44		
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40		
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37		
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6345	6345	6345
5°	6366	6306	6380
10°	6376	6337	6348
15°	6311	6289	6303
20°	6180	6246	6281
25°	6142	6139	6256
30°	5992	6065	6213
35°	5778	5755	5288
40°	5131	4528	3965
45°	3894	3387	3206
50°	2762	2711	2176
55°	1891	2314	1495
60°	1169	1847	999
65°	963	1422	724
70°	958	1238	743
75°	1150	887	992
80°	1322	818	1243
85°	1254	1442	1411



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.7	5.0
10°-20°	638.5	14.4
20°-30°	960.2	21.7
30°-40°	1046.8	23.6
40°-50°	733.0	16.5
50°-60°	414.9	9.4
60°-70°	227.0	5.1
70°-80°	137.6	3.1
80°-90°	52.2	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°	1822.5	41.1
0°-40°	2869.3	64.7
0°-60°	4017.2	90.6
0°-90°	4434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4434.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2358	2358	2358	2358	2358	
5°	2357	2353	2334	2362	2362	224
15°	2266	2259	2257	2290	2262	637
25°	2069	2073	2068	2115	2107	950
35°	1759	1751	1752	1663	1610	1084
45°	1023	1068	890	879	842	795
55°	403	482	493	489	319	368
65°	151	249	223	282	114	155
75°	111	159	85	168	95	115
85°	41	66	47	57	46	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2357.8	2357.8	2357.8	2357.8	2357.8
2.5°	2363.9	2360.9	2353.8	2368.0	2367.0
5°	2356.8	2352.8	2334.5	2361.9	2361.9
7.5°	2346.7	2336.5	2337.5	2352.8	2345.6
10°	2333.5	2316.2	2319.3	2323.3	2323.3
12.5°	2303.0	2286.8	2278.7	2291.9	2295.9
15°	2265.5	2259.4	2257.3	2289.8	2262.4
17.5°	2212.7	2225.9	2213.7	2240.1	2244.1
20°	2157.9	2183.2	2181.2	2199.5	2193.4
22.5°	2113.2	2129.5	2129.5	2151.8	2170.1
25°	2068.6	2072.6	2067.5	2115.2	2107.1
27.5°	2010.7	2007.7	2023.9	2048.3	2064.5
30°	1928.5	1929.5	1951.8	1984.3	1999.5
32.5°	1853.4	1844.2	1871.6	1885.9	1869.6
35°	1759.0	1750.9	1751.9	1662.6	1609.8
37.5°	1630.1	1637.2	1543.8	1380.4	1311.4
40°	1460.6	1474.8	1289.0	1167.2	1128.7
42.5°	1255.5	1259.6	1056.6	1017.0	991.6
45°	1023.1	1067.8	890.1	879.0	842.4
47.5°	811.0	894.2	746.0	753.1	665.8
50°	659.7	743.0	647.6	650.6	519.7
52.5°	521.7	602.9	571.4	562.3	408.0
55°	403.0	482.1	493.3	489.2	318.7
57.5°	296.4	381.6	414.1	429.3	245.6
60°	217.2	311.6	343.1	373.5	185.7
62.5°	172.5	270.0	281.2	325.8	144.1
65°	151.2	248.7	223.3	282.2	113.7
67.5°	135.0	236.5	181.7	249.7	99.5
70°	121.8	213.1	157.3	223.3	94.4
72.5°	121.8	186.8	123.8	197.9	95.4
75°	110.6	159.4	85.3	167.5	95.4
77.5°	98.5	136.0	63.9	136.0	89.3
80°	85.3	106.6	52.8	104.5	80.2
82.5°	62.9	80.2	45.7	78.2	65.0
85°	40.6	66.0	46.7	56.8	45.7
87.5°	19.3	33.5	29.4	28.4	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)