

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: P291373

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291373
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-L83050-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4454.0 lumens
Efficiency: N/A
Efficacy: 119.1 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

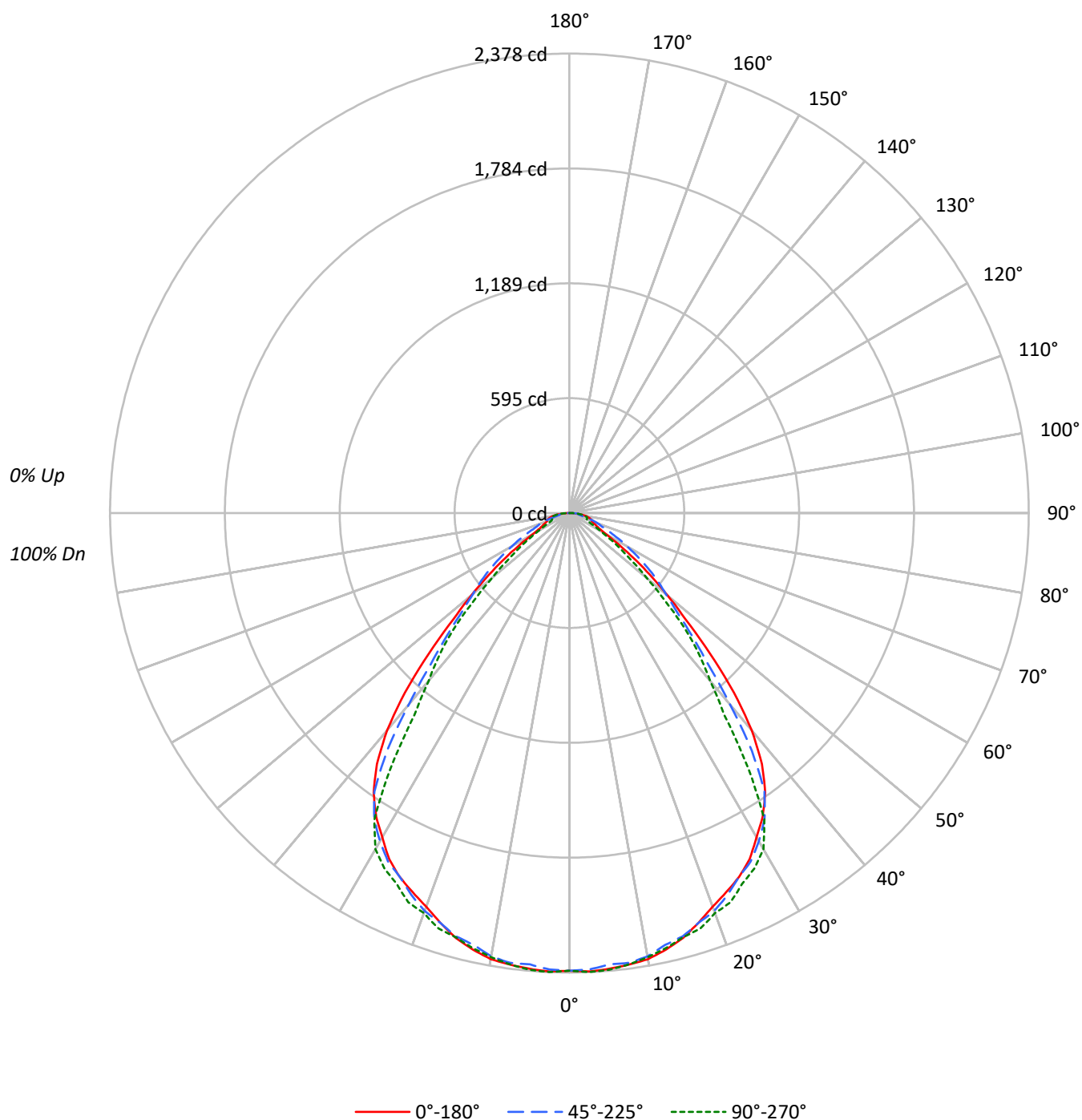
Input Watts (W): 37.386
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6374	6374	6374
5°	6395	6334	6409
10°	6405	6366	6377
15°	6340	6317	6331
20°	6207	6275	6310
25°	6170	6167	6285
30°	6019	6092	6241
35°	5804	5781	5312
40°	5154	4549	3983
45°	3911	3403	3220
50°	2774	2723	2185
55°	1899	2325	1502
60°	1174	1855	1004
65°	967	1428	727
70°	962	1243	746
75°	1155	890	996
80°	1327	821	1247
85°	1260	1448	1417



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.7	5.0
10°-20°	641.4	14.4
20°-30°	964.6	21.7
30°-40°	1051.5	23.6
40°-50°	736.3	16.5
50°-60°	416.8	9.4
60°-70°	228.0	5.1
70°-80°	138.2	3.1
80°-90°	52.4	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°	1830.7	41.1
0°-40°	2882.3	64.7
0°-60°	4035.3	90.6
0°-90°	4454.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4454.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2368	2368	2368	2368	2368	
5°	2367	2363	2345	2372	2372	225
15°	2276	2270	2268	2300	2273	640
25°	2078	2082	2077	2125	2117	954
35°	1767	1759	1760	1670	1617	1089
45°	1028	1073	894	883	846	798
55°	405	484	496	491	320	370
65°	152	250	224	283	114	156
75°	111	160	86	168	96	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°	2368.5	2368.5	2368.5	2368.5	2368.5
2.5°	2374.6	2371.5	2364.4	2378.7	2377.6
5°	2367.4	2363.4	2345.0	2372.5	2372.5
7.5°	2357.2	2347.1	2348.1	2363.4	2356.2
10°	2344.0	2326.7	2329.7	2333.8	2333.8
12.5°	2313.4	2297.1	2288.9	2302.2	2306.3
15°	2275.7	2269.6	2267.5	2300.2	2272.6
17.5°	2222.7	2235.9	2223.7	2250.2	2254.3
20°	2167.6	2193.1	2191.1	2209.4	2203.3
22.5°	2122.7	2139.1	2139.1	2161.5	2179.8
25°	2077.9	2082.0	2076.9	2124.8	2116.6
27.5°	2019.8	2016.7	2033.0	2057.5	2073.8
30°	1937.2	1938.2	1960.6	1993.3	2008.6
32.5°	1861.7	1852.6	1880.1	1894.4	1878.1
35°	1766.9	1758.8	1759.8	1670.1	1617.0
37.5°	1637.4	1644.6	1550.8	1386.6	1317.3
40°	1467.2	1481.4	1294.9	1172.5	1133.8
42.5°	1261.2	1265.3	1061.4	1021.6	996.1
45°	1027.7	1072.6	894.2	882.9	846.2
47.5°	814.6	898.2	749.4	756.5	668.8
50°	662.7	746.3	650.5	653.5	522.0
52.5°	524.1	605.6	574.0	564.8	409.9
55°	404.8	484.3	495.5	491.4	320.1
57.5°	297.7	383.4	416.0	431.3	246.7
60°	218.2	313.0	344.6	375.2	186.6
62.5°	173.3	271.2	282.4	327.3	144.8
65°	151.9	249.8	224.3	283.4	114.2
67.5°	135.6	237.6	182.5	250.8	99.9
70°	122.3	214.1	158.0	224.3	94.8
72.5°	122.3	187.6	124.4	198.8	95.8
75°	111.1	160.1	85.6	168.2	95.8
77.5°	98.9	136.6	64.2	136.6	89.7
80°	85.6	107.1	53.0	105.0	80.5
82.5°	63.2	80.5	45.9	78.5	65.3
85°	40.8	66.3	46.9	57.1	45.9
87.5°	19.4	33.6	29.6	28.5	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)