

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: P291344

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291344
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-LD5-20-A19/156-UNV-L83050-W2A1-U-4500K
Description: GRLED 1x4 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: 2124.0 lumens
Efficiency: N/A
Efficacy: 130.5 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

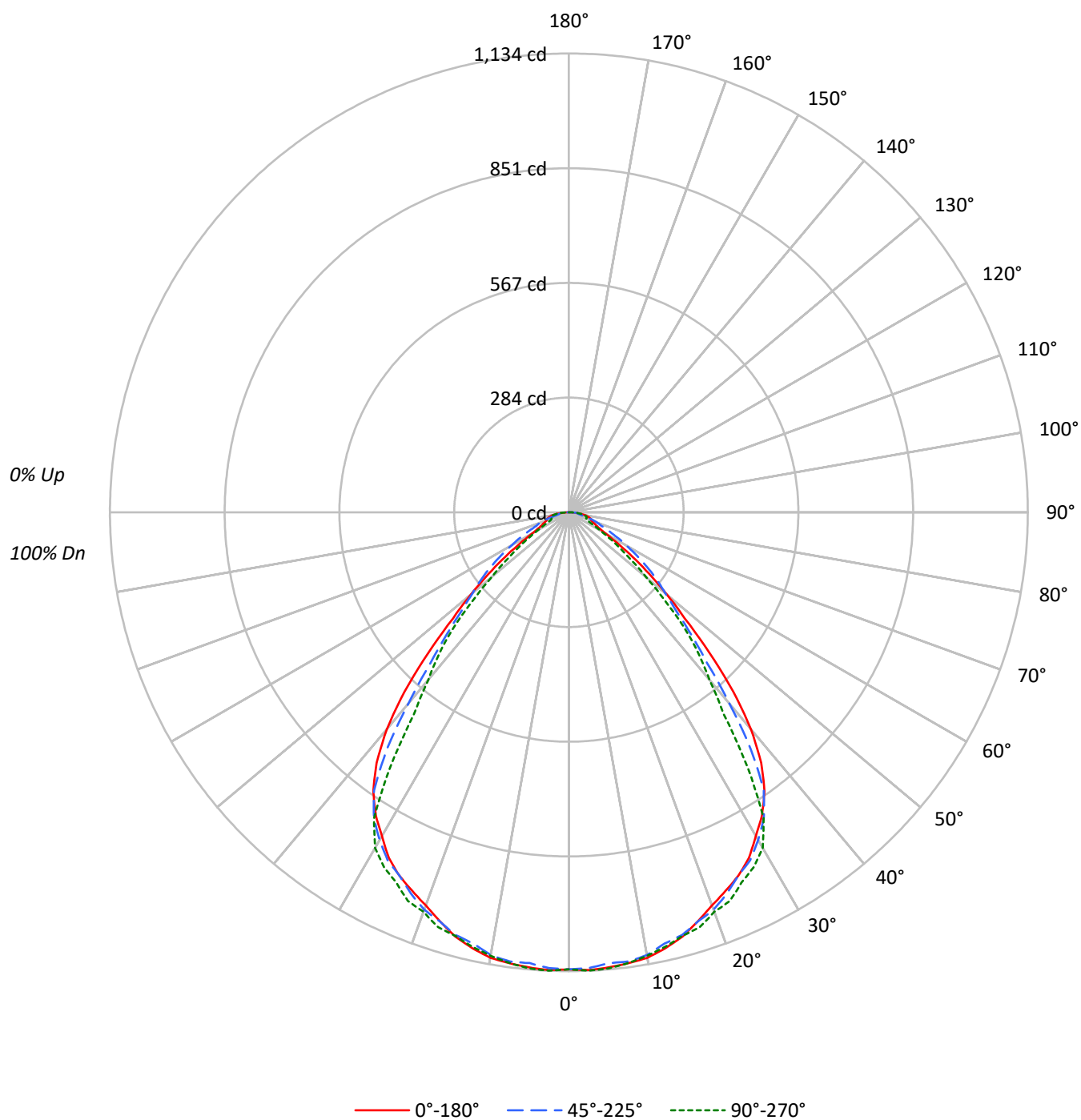
Input Watts (W): 16.275
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3039	3039	3039
5°	3050	3021	3056
10°	3054	3036	3041
15°	3023	3012	3019
20°	2960	2992	3009
25°	2942	2941	2997
30°	2871	2905	2976
35°	2768	2757	2533
40°	2458	2169	1899
45°	1865	1623	1536
50°	1323	1299	1042
55°	905	1109	716
60°	560	884	479
65°	461	681	347
70°	459	593	356
75°	551	424	475
80°	632	392	595
85°	599	692	676



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	5.0
10°-20°	305.9	14.4
20°-30°	460.0	21.7
30°-40°	501.5	23.6
40°-50°	351.1	16.5
50°-60°	198.8	9.4
60°-70°	108.8	5.1
70°-80°	65.9	3.1
80°-90°	25.0	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°	873.0	41.1
0°-40°	1374.5	64.7
0°-60°	1924.4	90.6
0°-90°	2124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1129	1127	1118	1131	1131	107
15°	1085	1082	1081	1097	1084	305
25°	991	993	990	1013	1009	455
35°	843	839	839	796	771	519
45°	490	512	426	421	404	381
55°	193	231	236	234	153	176
65°	72	119	107	135	54	74
75°	53	76	41	80	46	55
85°	19	32	22	27	22	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1129.5	1129.5	1129.5	1129.5	1129.5
2.5°	1132.4	1130.9	1127.5	1134.3	1133.8
5°	1129.0	1127.0	1118.3	1131.4	1131.4
7.5°	1124.1	1119.3	1119.7	1127.0	1123.6
10°	1117.8	1109.5	1111.0	1112.9	1112.9
12.5°	1103.2	1095.4	1091.5	1097.9	1099.8
15°	1085.2	1082.3	1081.3	1096.9	1083.8
17.5°	1059.9	1066.3	1060.4	1073.1	1075.0
20°	1033.7	1045.8	1044.9	1053.6	1050.7
22.5°	1012.3	1020.1	1020.1	1030.8	1039.5
25°	990.9	992.8	990.4	1013.3	1009.4
27.5°	963.2	961.7	969.5	981.2	988.9
30°	923.8	924.3	935.0	950.5	957.8
32.5°	887.8	883.4	896.6	903.4	895.6
35°	842.6	838.7	839.2	796.4	771.1
37.5°	780.8	784.3	739.5	661.2	628.2
40°	699.7	706.5	617.5	559.1	540.7
42.5°	601.4	603.4	506.1	487.2	475.0
45°	490.1	511.5	426.4	421.1	403.6
47.5°	388.5	428.3	357.4	360.8	319.0
50°	316.0	355.9	310.2	311.7	248.9
52.5°	249.9	288.8	273.7	269.4	195.5
55°	193.0	230.9	236.3	234.4	152.7
57.5°	142.0	182.8	198.4	205.7	117.7
60°	104.0	149.3	164.3	178.9	89.0
62.5°	82.7	129.3	134.7	156.1	69.0
65°	72.4	119.1	107.0	135.2	54.5
67.5°	64.7	113.3	87.0	119.6	47.6
70°	58.3	102.1	75.4	107.0	45.2
72.5°	58.3	89.5	59.3	94.8	45.7
75°	53.0	76.3	40.8	80.2	45.7
77.5°	47.2	65.2	30.6	65.2	42.8
80°	40.8	51.1	25.3	50.1	38.4
82.5°	30.1	38.4	21.9	37.4	31.1
85°	19.4	31.6	22.4	27.2	21.9
87.5°	9.2	16.0	14.1	13.6	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)