

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: P291380

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291380
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-L82765-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: 2036.0 lumens
Efficiency: N/A
Efficacy: 128.8 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

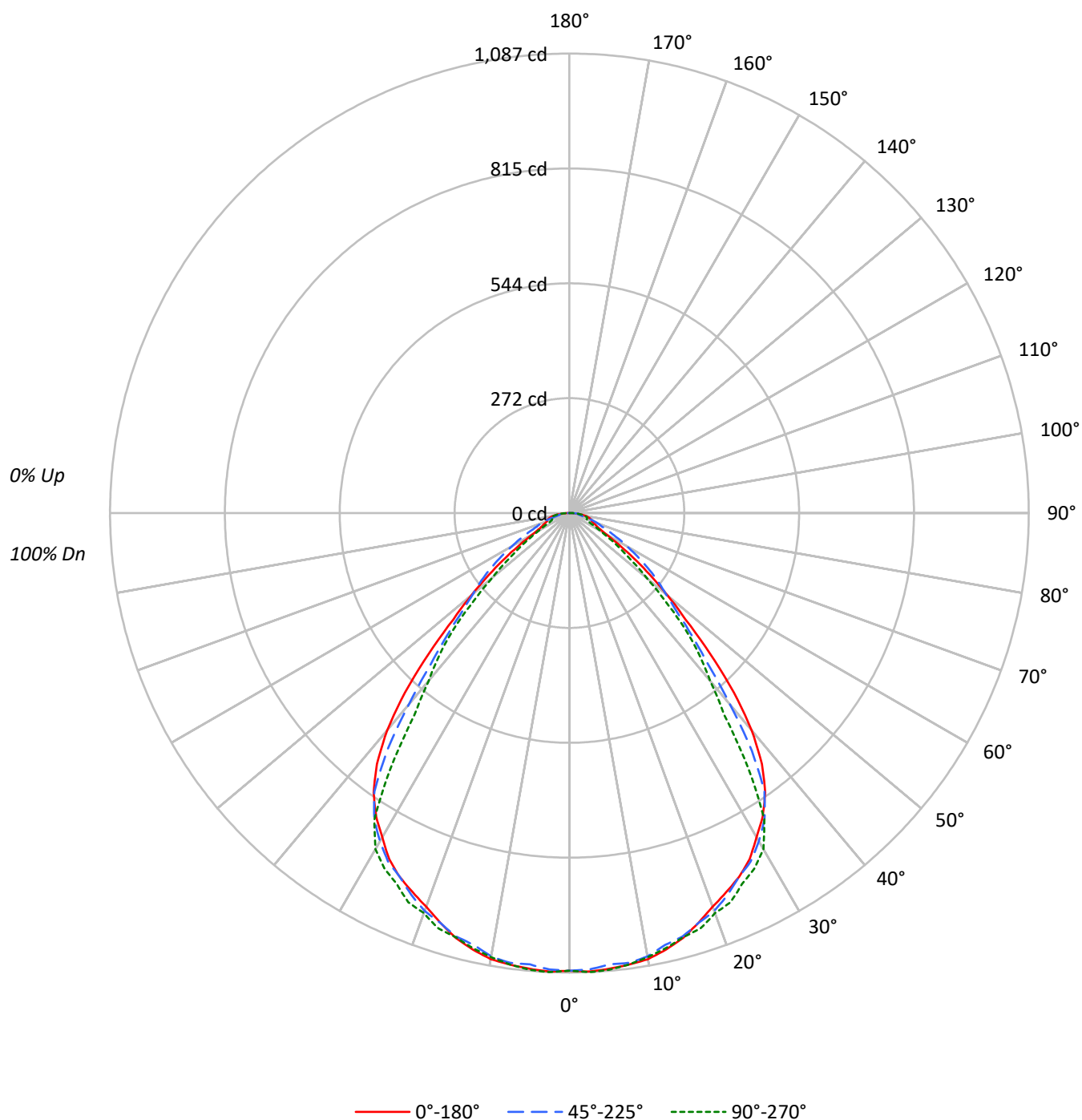
Input Watts (W): 15.81
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2914	2914	2914
5°	2923	2895	2930
10°	2928	2910	2915
15°	2898	2888	2894
20°	2838	2868	2884
25°	2820	2819	2873
30°	2751	2785	2853
35°	2653	2643	2428
40°	2356	2079	1821
45°	1788	1555	1472
50°	1268	1245	999
55°	868	1063	686
60°	537	848	459
65°	442	653	332
70°	440	568	341
75°	528	407	455
80°	606	375	570
85°	574	661	648



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.7	5.0
10°-20°	293.2	14.4
20°-30°	440.9	21.7
30°-40°	480.7	23.6
40°-50°	336.6	16.5
50°-60°	190.5	9.4
60°-70°	104.2	5.1
70°-80°	63.2	3.1
80°-90°	23.9	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°	836.8	41.1
0°-40°	1317.5	64.7
0°-60°	1844.6	90.6
0°-90°	2036.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2036.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1083	1083	1083	1083	1083	
5°	1082	1080	1072	1084	1084	103
15°	1040	1038	1036	1051	1039	293
25°	950	952	949	971	968	436
35°	808	804	804	763	739	498
45°	470	490	409	404	387	365
55°	185	221	226	225	146	169
65°	69	114	102	130	52	71
75°	51	73	39	77	44	53
85°	19	30	21	26	21	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1085.5	1084.1	1080.8	1087.3	1086.9
5°	1082.2	1080.3	1071.9	1084.5	1084.5
7.5°	1077.5	1072.9	1073.3	1080.3	1077.1
10°	1071.5	1063.6	1065.0	1066.8	1066.8
12.5°	1057.5	1050.0	1046.3	1052.4	1054.2
15°	1040.3	1037.5	1036.5	1051.4	1038.9
17.5°	1016.0	1022.1	1016.5	1028.6	1030.5
20°	990.9	1002.5	1001.6	1010.0	1007.2
22.5°	970.3	977.8	977.8	988.1	996.4
25°	949.8	951.7	949.4	971.3	967.5
27.5°	923.3	921.9	929.3	940.5	948.0
30°	885.5	886.0	896.2	911.2	918.1
32.5°	851.0	846.8	859.4	865.9	858.5
35°	807.7	804.0	804.4	763.4	739.2
37.5°	748.5	751.8	708.9	633.8	602.2
40°	670.7	677.2	591.9	536.0	518.3
42.5°	576.5	578.4	485.2	467.0	455.3
45°	469.8	490.3	408.7	403.6	386.8
47.5°	372.4	410.6	342.6	345.8	305.7
50°	302.9	341.2	297.3	298.7	238.6
52.5°	239.6	276.8	262.4	258.2	187.4
55°	185.0	221.4	226.5	224.6	146.3
57.5°	136.1	175.2	190.2	197.1	112.8
60°	99.7	143.1	157.5	171.5	85.3
62.5°	79.2	124.0	129.1	149.6	66.2
65°	69.4	114.2	102.5	129.6	52.2
67.5°	62.0	108.6	83.4	114.7	45.7
70°	55.9	97.9	72.2	102.5	43.3
72.5°	55.9	85.8	56.9	90.9	43.8
75°	50.8	73.2	39.1	76.9	43.8
77.5°	45.2	62.5	29.4	62.5	41.0
80°	39.1	48.9	24.2	48.0	36.8
82.5°	28.9	36.8	21.0	35.9	29.8
85°	18.6	30.3	21.4	26.1	21.0
87.5°	8.9	15.4	13.5	13.0	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)