

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: P291385

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291385
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-LD5-24-A19/156-UNV-L82765-W2A1-U-2700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2153.0 lumens
Efficiency: N/A
Efficacy: 118.1 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

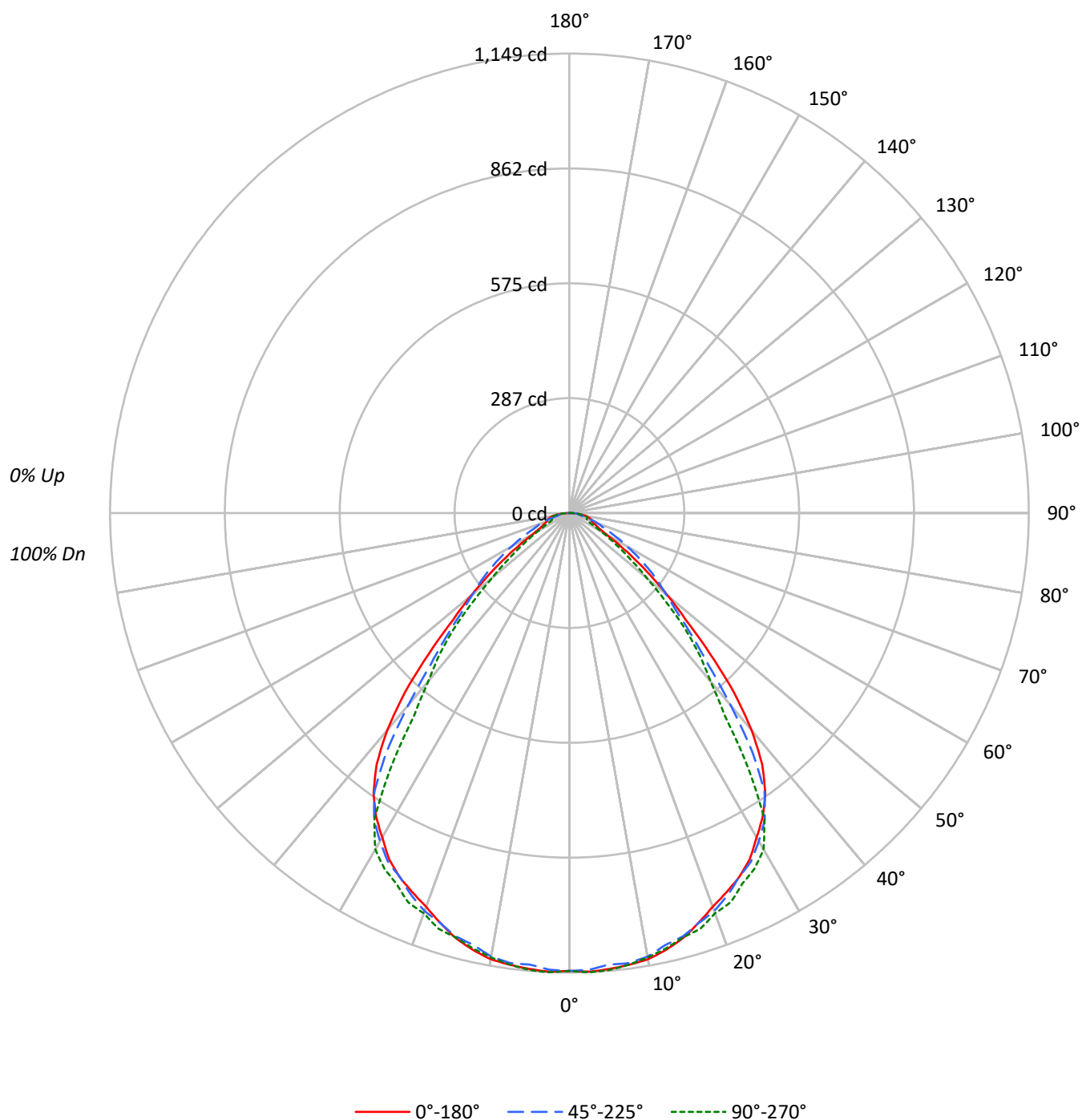
Input Watts (W): 18.228
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3081	3081	3081
5°	3091	3062	3098
10°	3096	3077	3083
15°	3064	3054	3061
20°	3001	3033	3050
25°	2982	2981	3038
30°	2910	2945	3017
35°	2806	2795	2568
40°	2491	2199	1925
45°	1891	1645	1557
50°	1341	1316	1056
55°	918	1124	726
60°	568	897	485
65°	467	690	351
70°	465	601	360
75°	558	430	481
80°	642	397	603
85°	608	701	685



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.6	5.0
10°-20°	310.0	14.4
20°-30°	466.3	21.7
30°-40°	508.3	23.6
40°-50°	355.9	16.5
50°-60°	201.5	9.4
60°-70°	110.2	5.1
70°-80°	66.8	3.1
80°-90°	25.3	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°	884.9	41.1
0°-40°	1393.2	64.7
0°-60°	1950.6	90.6
0°-90°	2153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2153.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1145	1145	1145	1145	1145	
5°	1144	1142	1134	1147	1147	109
15°	1100	1097	1096	1112	1099	309
25°	1004	1006	1004	1027	1023	461
35°	854	850	851	807	782	526
45°	497	518	432	427	409	386
55°	196	234	240	238	155	179
65°	73	121	108	137	55	75
75°	54	77	41	81	46	56
85°	20	32	23	28	22	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1144.9	1144.9	1144.9	1144.9	1144.9
2.5°	1147.8	1146.4	1142.9	1149.8	1149.3
5°	1144.4	1142.4	1133.5	1146.9	1146.9
7.5°	1139.5	1134.5	1135.0	1142.4	1139.0
10°	1133.1	1124.7	1126.2	1128.1	1128.1
12.5°	1118.3	1110.4	1106.4	1112.8	1114.8
15°	1100.0	1097.1	1096.1	1111.9	1098.6
17.5°	1074.4	1080.8	1074.9	1087.7	1089.7
20°	1047.8	1060.1	1059.1	1068.0	1065.0
22.5°	1026.1	1034.0	1034.0	1044.8	1053.7
25°	1004.4	1006.4	1003.9	1027.1	1023.1
27.5°	976.3	974.8	982.7	994.6	1002.4
30°	936.4	936.9	947.7	963.5	970.9
32.5°	899.9	895.5	908.8	915.7	907.8
35°	854.1	850.2	850.7	807.3	781.7
37.5°	791.5	795.0	749.6	670.3	636.8
40°	709.2	716.1	625.9	566.8	548.0
42.5°	609.7	611.6	513.1	493.8	481.5
45°	496.8	518.5	432.2	426.8	409.1
47.5°	393.8	434.2	362.2	365.7	323.3
50°	320.4	360.8	314.4	315.9	252.3
52.5°	253.3	292.8	277.5	273.0	198.1
55°	195.7	234.1	239.5	237.6	154.8
57.5°	143.9	185.3	201.1	208.5	119.3
60°	105.5	151.3	166.6	181.4	90.2
62.5°	83.8	131.1	136.5	158.2	70.0
65°	73.4	120.7	108.4	137.0	55.2
67.5°	65.5	114.8	88.2	121.2	48.3
70°	59.1	103.5	76.4	108.4	45.8
72.5°	59.1	90.7	60.1	96.1	46.3
75°	53.7	77.4	41.4	81.3	46.3
77.5°	47.8	66.0	31.0	66.0	43.4
80°	41.4	51.7	25.6	50.8	38.9
82.5°	30.6	38.9	22.2	37.9	31.5
85°	19.7	32.0	22.7	27.6	22.2
87.5°	9.4	16.3	14.3	13.8	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)