

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: P291489

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291489
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-L92765-W2A1-U-5500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2202.0 lumens
Efficiency: N/A
Efficacy: 117.2 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

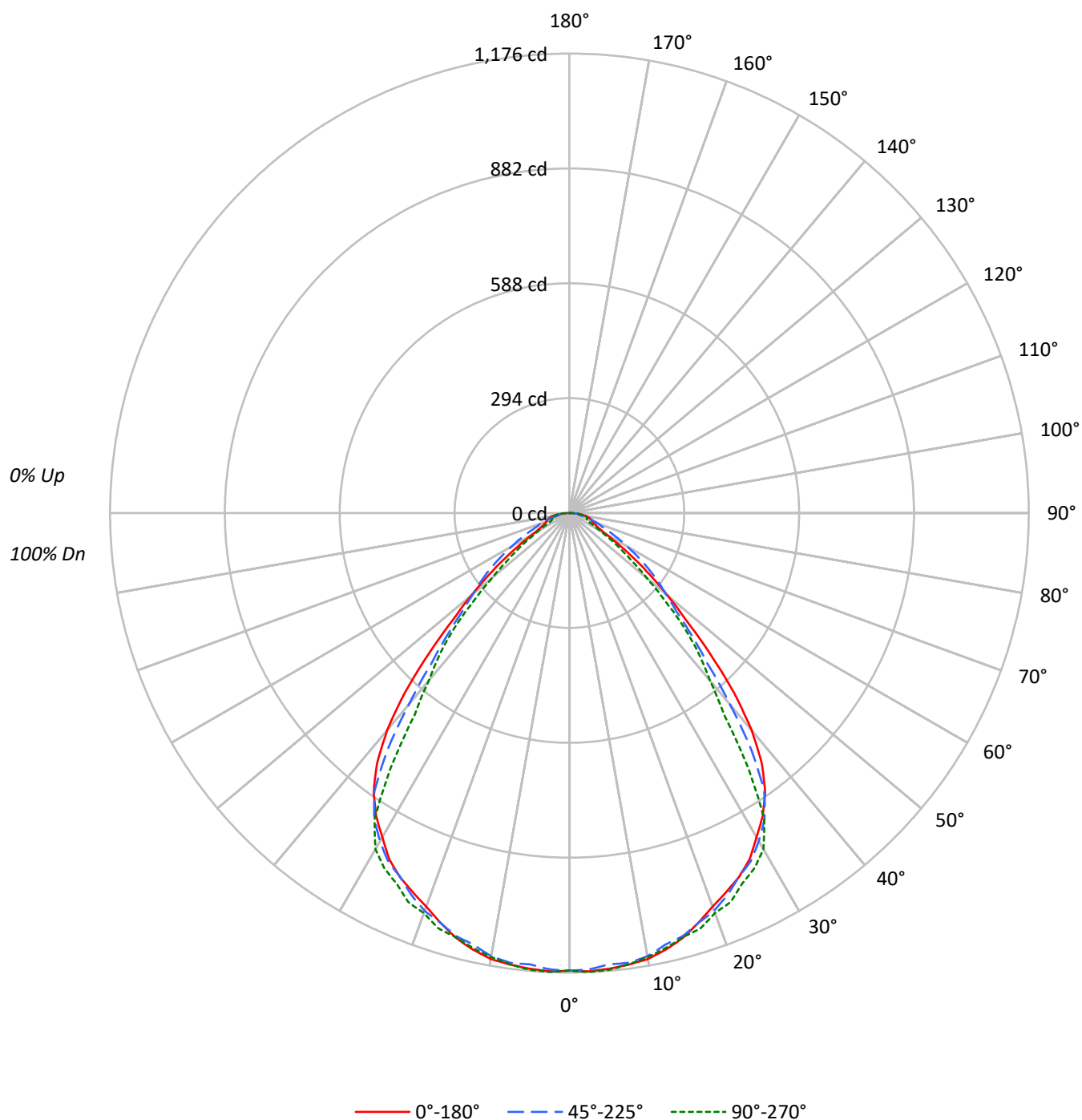
Input Watts (W): 18.786
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3151	3151	3151
5°	3162	3132	3169
10°	3166	3147	3153
15°	3134	3123	3130
20°	3069	3102	3119
25°	3050	3049	3107
30°	2976	3012	3086
35°	2870	2858	2626
40°	2548	2249	1969
45°	1934	1682	1592
50°	1371	1346	1081
55°	939	1149	743
60°	581	917	496
65°	478	706	360
70°	476	614	369
75°	571	440	493
80°	656	406	617
85°	624	716	701



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.1	5.0
10°-20°	317.1	14.4
20°-30°	476.9	21.7
30°-40°	519.9	23.6
40°-50°	364.0	16.5
50°-60°	206.1	9.4
60°-70°	112.7	5.1
70°-80°	68.3	3.1
80°-90°	25.9	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°	905.1	41.1
0°-40°	1424.9	64.7
0°-60°	1995.0	90.6
0°-90°	2202.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2202.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1171	1171	1171	1171	1171	
5°	1170	1168	1159	1173	1173	111
15°	1125	1122	1121	1137	1124	316
25°	1027	1029	1027	1050	1046	472
35°	874	870	870	826	799	538
45°	508	530	442	436	418	395
55°	200	239	245	243	158	183
65°	75	124	111	140	56	77
75°	55	79	42	83	47	57
85°	20	33	23	28	23	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.9	1170.9	1170.9	1170.9	1170.9
2.5°	1174.0	1172.5	1168.9	1176.0	1175.5
5°	1170.4	1168.4	1159.3	1173.0	1173.0
7.5°	1165.4	1160.4	1160.9	1168.4	1164.9
10°	1158.8	1150.3	1151.8	1153.8	1153.8
12.5°	1143.7	1135.7	1131.6	1138.2	1140.2
15°	1125.1	1122.0	1121.0	1137.2	1123.6
17.5°	1098.9	1105.4	1099.4	1112.5	1114.5
20°	1071.6	1084.2	1083.2	1092.3	1089.3
22.5°	1049.5	1057.5	1057.5	1068.6	1077.7
25°	1027.3	1029.3	1026.8	1050.5	1046.4
27.5°	998.5	997.0	1005.1	1017.2	1025.3
30°	957.7	958.2	969.3	985.4	993.0
32.5°	920.4	915.9	929.5	936.5	928.5
35°	873.5	869.5	870.0	825.7	799.4
37.5°	809.5	813.1	766.7	685.5	651.2
40°	725.3	732.4	640.2	579.7	560.5
42.5°	623.5	625.5	524.7	505.1	492.5
45°	508.1	530.3	442.1	436.5	418.4
47.5°	402.7	444.1	370.5	374.0	330.7
50°	327.6	369.0	321.6	323.1	258.1
52.5°	259.1	299.4	283.8	279.3	202.6
55°	200.1	239.4	245.0	243.0	158.3
57.5°	147.2	189.5	205.7	213.2	122.0
60°	107.9	154.7	170.4	185.5	92.2
62.5°	85.7	134.1	139.6	161.8	71.6
65°	75.1	123.5	110.9	140.1	56.5
67.5°	67.0	117.4	90.2	124.0	49.4
70°	60.5	105.9	78.1	110.9	46.9
72.5°	60.5	92.7	61.5	98.3	47.4
75°	54.9	79.1	42.3	83.2	47.4
77.5°	48.9	67.5	31.8	67.5	44.4
80°	42.3	52.9	26.2	51.9	39.8
82.5°	31.3	39.8	22.7	38.8	32.3
85°	20.2	32.8	23.2	28.2	22.7
87.5°	9.6	16.6	14.6	14.1	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)