

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: P290714

Luminaire Tested: **14GR-LD5-28-F1-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290714
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-F1-UNV-L92765-W2A1-U-5500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2704.0 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

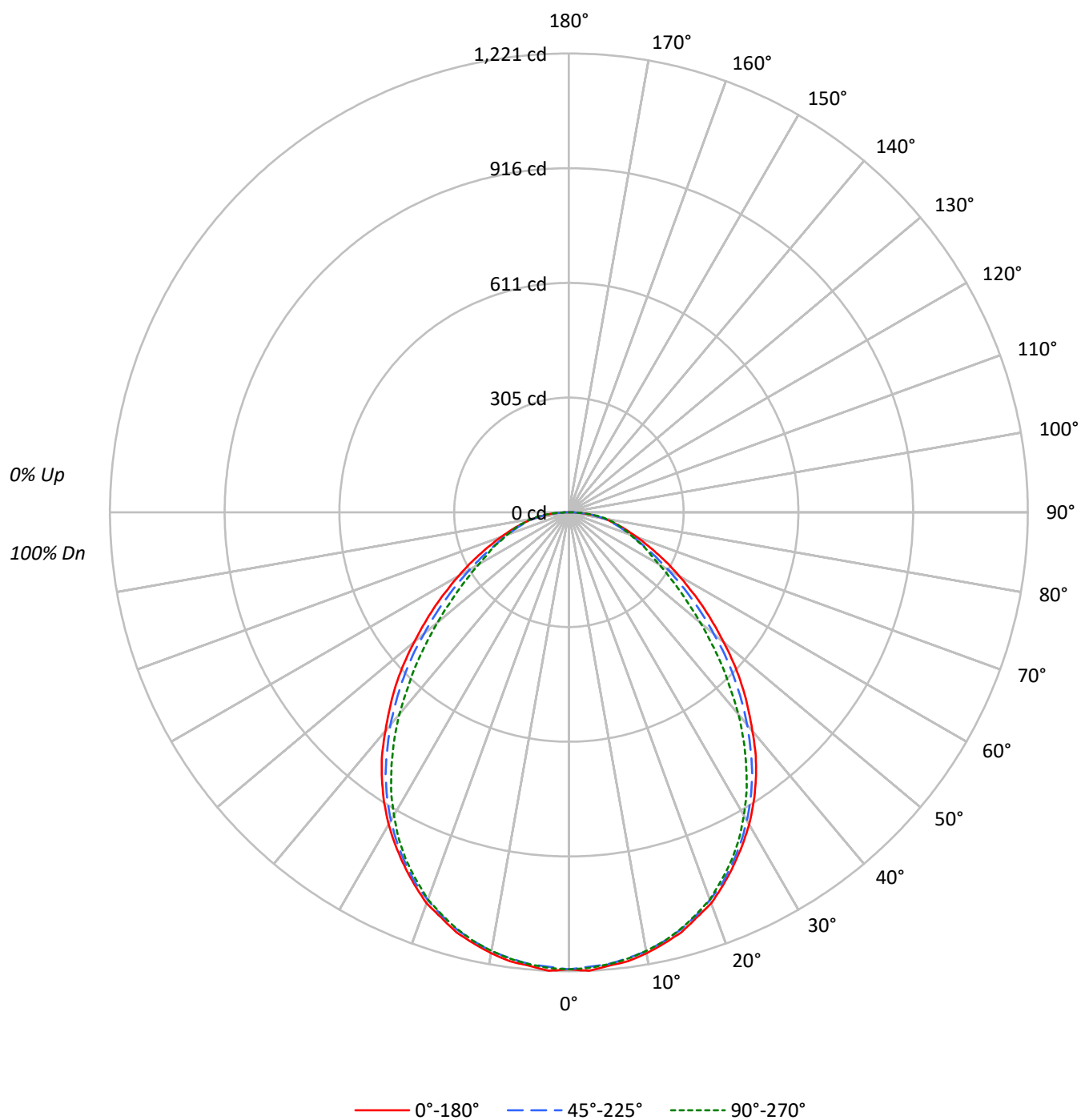
Input Watts (W): 22.878
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	105	101	98	107	103	99	96		99	96	93		95	92	90		91	89	87
2	101	93	87	81	98	91	85	80		88	83	78		84	80	77		81	78	75
3	92	83	75	69	90	81	74	68		78	72	67		75	70	66		73	69	65
4	85	74	66	59	83	73	65	59		70	64	58		68	62	57		66	61	57
5	79	67	58	52	77	66	58	52		64	57	51		62	55	51		60	54	50
6	73	61	52	46	71	60	52	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41	66	54	47	41		53	46	41		52	45	40		50	44	40
8	64	51	43	37	62	50	42	37		49	42	37		47	41	36		46	41	36
9	60	47	39	34	58	46	39	33		45	38	33		44	38	33		43	37	33
10	56	43	36	31	55	43	35	31		42	35	30		41	35	30		40	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3272	3272	3272
5°	3271	3260	3261
10°	3255	3240	3238
15°	3222	3203	3198
20°	3170	3143	3140
25°	3079	3059	3037
30°	2979	2943	2893
35°	2848	2794	2702
40°	2667	2593	2465
45°	2477	2366	2194
50°	2247	2107	1910
55°	2032	1861	1669
60°	1824	1631	1488
65°	1638	1456	1424
70°	1511	1356	1371
75°	1443	1360	1437
80°	1460	1450	1565
85°	1513	1491	1664



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	4.2
10°-20°	324.5	12.0
20°-30°	474.0	17.5
30°-40°	528.1	19.5
40°-50°	475.9	17.6
50°-60°	355.7	13.2
60°-70°	234.6	8.7
70°-80°	143.2	5.3
80°-90°	53.1	2.0
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°	913.3	33.8
0°-40°	1441.4	53.3
0°-60°	2273.0	84.1
0°-90°	2704.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2704.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1211	1210	1207	1213	1207	115
15°	1157	1152	1150	1157	1148	326
25°	1037	1033	1030	1032	1023	477
35°	867	860	850	836	822	541
45°	651	644	622	593	576	501
55°	433	426	397	364	356	388
65°	257	249	229	219	224	258
75°	139	136	131	135	138	148
85°	49	47	48	53	54	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.1	1216.1	1216.1	1216.1	1216.1
2.5°	1221.0	1215.4	1210.5	1217.9	1213.6
5°	1211.1	1209.9	1206.8	1213.0	1207.4
7.5°	1204.9	1200.6	1196.8	1204.3	1198.1
10°	1191.3	1188.8	1185.7	1191.9	1185.1
12.5°	1174.5	1172.1	1169.0	1176.4	1169.0
15°	1156.6	1152.2	1149.7	1156.6	1147.9
17.5°	1130.5	1128.7	1124.9	1131.8	1123.1
20°	1107.0	1100.2	1097.7	1102.6	1096.4
22.5°	1072.9	1067.9	1067.3	1070.4	1059.9
25°	1036.9	1033.2	1030.1	1032.0	1022.7
27.5°	999.1	994.2	990.4	989.8	979.9
30°	958.8	952.6	947.1	942.1	930.9
32.5°	914.8	907.4	900.0	891.9	880.1
35°	867.1	859.7	850.4	835.5	822.5
37.5°	816.9	808.2	793.4	776.0	763.0
40°	759.3	754.9	738.2	715.9	701.6
42.5°	705.3	700.4	679.3	654.5	635.3
45°	650.8	644.0	621.7	593.2	576.4
47.5°	595.0	588.2	563.4	528.1	513.2
50°	536.8	533.0	503.3	471.1	456.2
52.5°	483.4	479.1	448.7	416.5	402.9
55°	433.2	426.4	396.7	363.8	355.8
57.5°	383.0	375.6	347.7	319.8	314.2
60°	339.0	329.7	303.1	281.4	276.4
62.5°	297.5	287.0	264.7	247.9	245.4
65°	257.2	249.2	228.7	219.4	223.7
67.5°	222.5	214.5	199.6	195.9	194.6
70°	192.1	184.7	172.3	173.5	174.2
72.5°	164.2	159.9	150.6	153.7	156.2
75°	138.8	136.4	130.8	135.1	138.2
77.5°	115.9	114.0	111.6	115.3	120.2
80°	94.2	93.0	93.6	96.1	101.0
82.5°	72.5	70.0	71.9	76.9	80.0
85°	49.0	47.1	48.3	53.3	53.9
87.5°	22.9	22.9	22.3	26.0	26.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)