

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: P292135

Luminaire Tested: **22GR-LD5-28-A-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292135
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-28-A-UNV-L83050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2750.0 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

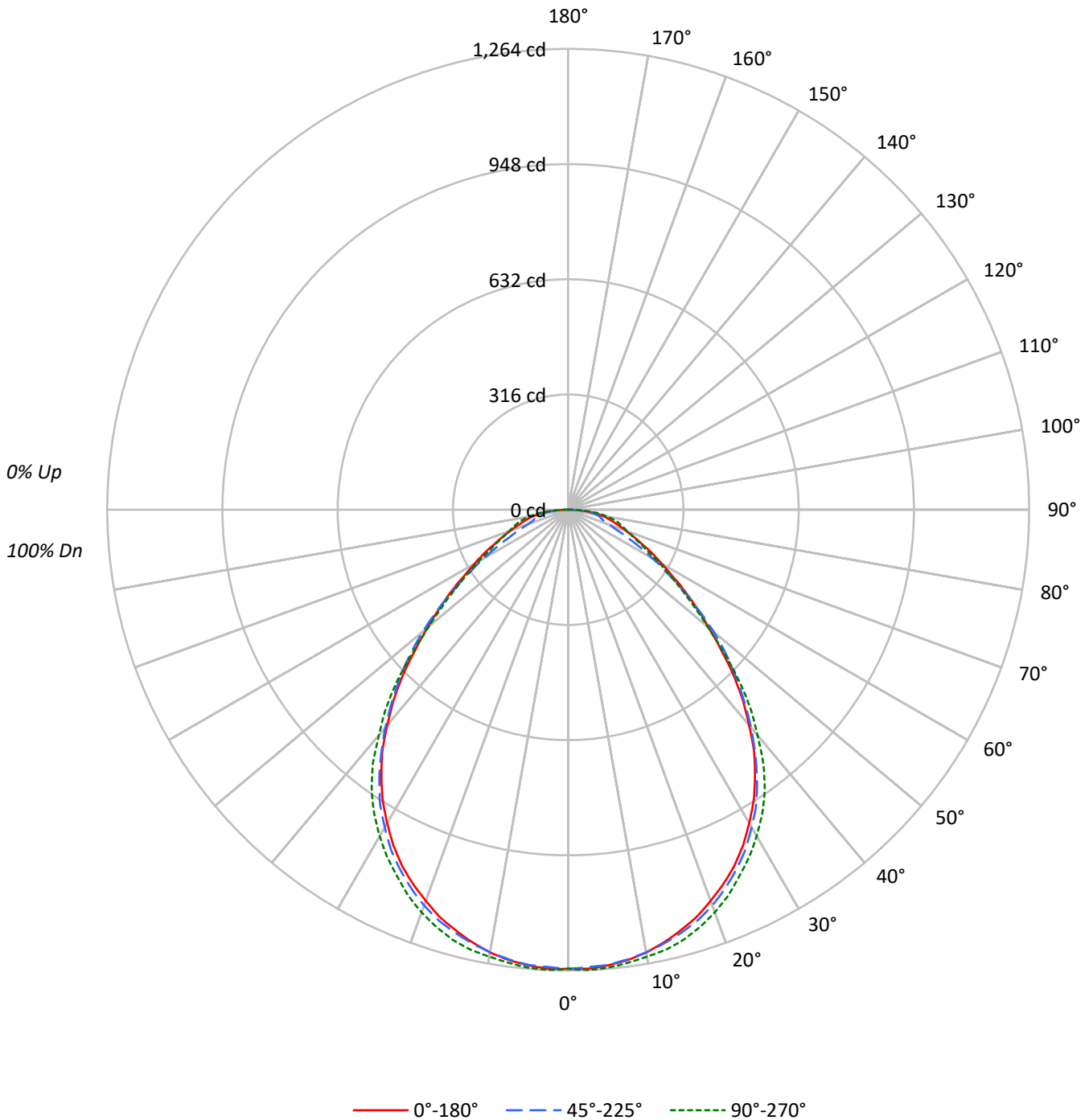
Input Watts (W): 22.041
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3389	3389	3389
5°	3390	3385	3405
10°	3370	3368	3401
15°	3327	3344	3403
20°	3269	3308	3367
25°	3200	3236	3295
30°	3084	3126	3211
35°	2933	2966	3086
40°	2711	2740	2837
45°	2435	2479	2518
50°	2106	2181	2084
55°	1837	1789	1765
60°	1591	1433	1529
65°	1422	1124	1373
70°	1319	932	1354
75°	1317	985	1503
80°	1458	1240	1695
85°	1522	1343	1917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.2	4.3
10°-20°	339.4	12.3
20°-30°	502.0	18.3
30°-40°	566.5	20.6
40°-50°	499.4	18.2
50°-60°	342.6	12.5
60°-70°	202.1	7.4
70°-80°	126.1	4.6
80°-90°	52.6	1.9
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°	960.6	34.9
0°-40°	1527.1	55.5
0°-60°	2369.1	86.1
0°-90°	2750.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2750.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1259	1259	1259	1259	1259	
5°	1255	1252	1253	1258	1261	119
15°	1194	1195	1200	1215	1222	337
25°	1078	1082	1090	1104	1110	495
35°	893	900	903	925	939	556
45°	640	643	652	655	662	492
55°	392	382	381	369	376	351
65°	223	196	177	204	216	225
75°	127	114	95	132	145	136
85°	49	46	44	57	62	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1259.4	1259.4	1259.4	1259.4	1259.4
2.5°	1260.0	1256.8	1255.6	1260.7	1263.9
5°	1254.9	1252.4	1253.0	1257.5	1260.7
7.5°	1246.0	1244.0	1244.0	1250.4	1253.6
10°	1233.2	1232.5	1232.5	1240.2	1244.7
12.5°	1215.2	1215.9	1218.4	1228.7	1236.4
15°	1194.1	1195.4	1200.5	1215.2	1221.6
17.5°	1171.1	1171.1	1181.3	1192.8	1200.5
20°	1141.7	1143.6	1155.1	1167.9	1175.6
22.5°	1111.6	1114.8	1124.4	1139.1	1146.1
25°	1077.7	1081.5	1089.8	1103.9	1109.7
27.5°	1038.0	1043.1	1052.1	1062.3	1074.5
30°	992.5	1000.2	1006.0	1020.1	1033.5
32.5°	946.5	953.5	959.9	974.6	990.0
35°	892.7	900.4	903.0	924.7	939.4
37.5°	837.7	840.9	842.2	863.9	879.9
40°	771.8	778.2	780.1	797.4	807.6
42.5°	708.4	711.0	714.8	727.6	739.8
45°	639.9	643.1	651.5	655.3	661.7
47.5°	568.3	577.9	587.5	575.3	575.9
50°	503.0	510.7	520.9	497.9	497.9
52.5°	444.8	448.6	449.2	430.0	433.9
55°	391.6	382.0	381.4	368.6	376.3
57.5°	338.5	325.7	321.2	317.4	326.4
60°	295.7	272.6	266.2	272.0	284.1
62.5°	260.5	231.0	218.9	233.6	244.5
65°	223.3	196.5	176.6	204.1	215.7
67.5°	194.5	168.9	143.3	182.4	190.7
70°	167.7	147.8	118.4	165.7	172.1
72.5°	145.9	130.5	102.4	149.7	157.4
75°	126.7	113.9	94.7	132.5	144.6
77.5°	111.3	97.3	88.3	114.5	129.3
80°	94.1	80.0	80.0	96.0	109.4
82.5°	74.2	62.7	64.6	78.1	87.7
85°	49.3	46.1	43.5	57.0	62.1
87.5°	25.0	25.6	23.0	29.4	30.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)