

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: P292235

Luminaire Tested: **22GR-LD5-28-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292235
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-L93050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2671.0 lumens
Efficiency: N/A
Efficacy: 118.2 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

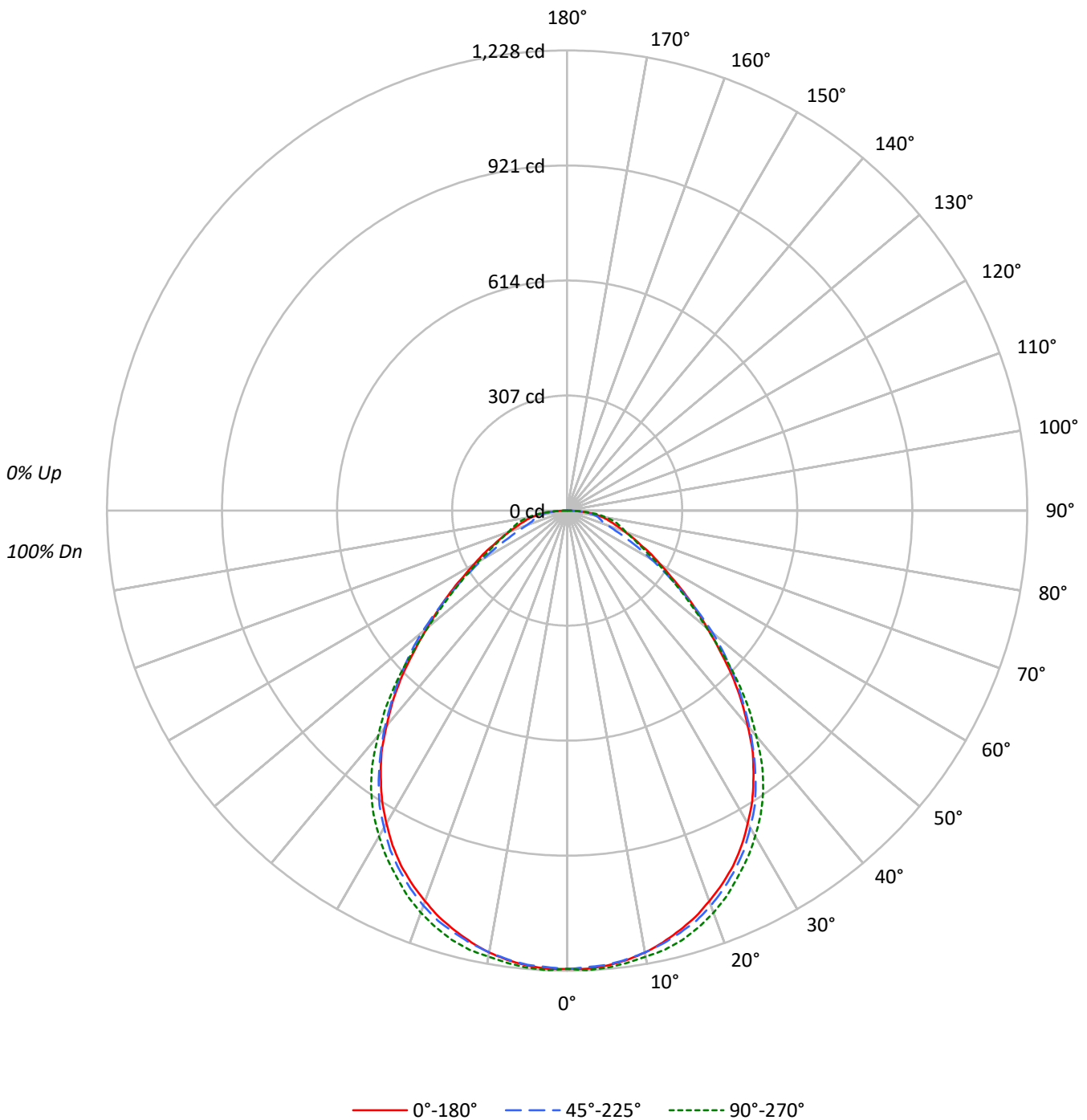
Input Watts (W): 22.599
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3292	3292	3292
5°	3293	3287	3308
10°	3273	3271	3303
15°	3231	3248	3305
20°	3176	3213	3270
25°	3108	3143	3200
30°	2995	3036	3119
35°	2848	2881	2997
40°	2633	2662	2755
45°	2366	2408	2446
50°	2045	2118	2025
55°	1785	1738	1715
60°	1546	1392	1485
65°	1381	1092	1334
70°	1281	905	1316
75°	1280	957	1461
80°	1416	1204	1647
85°	1479	1306	1862



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.8	4.3
10°-20°	329.7	12.3
20°-30°	487.6	18.3
30°-40°	550.2	20.6
40°-50°	485.0	18.2
50°-60°	332.7	12.5
60°-70°	196.3	7.4
70°-80°	122.5	4.6
80°-90°	51.1	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°	933.0	34.9
0°-40°	1483.2	55.5
0°-60°	2301.0	86.1
0°-90°	2671.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2671.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1223	1223	1223	1223	1223	
5°	1219	1216	1217	1221	1224	116
15°	1160	1161	1166	1180	1186	327
25°	1047	1050	1058	1072	1078	481
35°	867	874	877	898	912	540
45°	622	625	633	636	643	477
55°	380	371	370	358	366	341
65°	217	191	172	198	210	219
75°	123	111	92	129	140	132
85°	48	45	42	55	60	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1223.2	1223.2	1223.2	1223.2	1223.2
2.5°	1223.8	1220.7	1219.5	1224.5	1227.6
5°	1218.9	1216.4	1217.0	1221.4	1224.5
7.5°	1210.2	1208.3	1208.3	1214.5	1217.6
10°	1197.7	1197.1	1197.1	1204.6	1208.9
12.5°	1180.3	1181.0	1183.4	1193.4	1200.8
15°	1159.8	1161.1	1166.0	1180.3	1186.5
17.5°	1137.4	1137.4	1147.4	1158.6	1166.0
20°	1108.9	1110.7	1121.9	1134.3	1141.8
22.5°	1079.6	1082.7	1092.1	1106.4	1113.2
25°	1046.7	1050.4	1058.5	1072.2	1077.8
27.5°	1008.2	1013.1	1021.8	1031.8	1043.6
30°	964.0	971.5	977.1	990.8	1003.8
32.5°	919.3	926.1	932.3	946.6	961.5
35°	867.1	874.5	877.0	898.1	912.4
37.5°	813.6	816.7	818.0	839.1	854.6
40°	749.6	755.8	757.7	774.5	784.4
42.5°	688.1	690.5	694.3	706.7	718.5
45°	621.6	624.7	632.7	636.5	642.7
47.5°	551.9	561.3	570.6	558.8	559.4
50°	488.5	496.0	505.9	483.6	483.6
52.5°	432.0	435.7	436.3	417.7	421.4
55°	380.4	371.1	370.4	358.0	365.5
57.5°	328.8	316.4	312.0	308.3	317.0
60°	287.2	264.8	258.6	264.2	276.0
62.5°	253.0	224.4	212.6	226.9	237.4
65°	216.9	190.8	171.5	198.3	209.5
67.5°	189.0	164.1	139.2	177.1	185.2
70°	162.8	143.6	115.0	161.0	167.2
72.5°	141.7	126.8	99.4	145.4	152.9
75°	123.1	110.6	92.0	128.7	140.5
77.5°	108.2	94.5	85.8	111.3	125.6
80°	91.4	77.7	77.7	93.2	106.3
82.5°	72.1	60.9	62.8	75.8	85.2
85°	47.9	44.8	42.3	55.3	60.3
87.5°	24.2	24.9	22.4	28.6	29.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)