

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: P292180

Luminaire Tested: **22GR-LD5-28-A-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292180
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-L82765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2841.0 lumens
Efficiency: N/A
Efficacy: 128.4 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

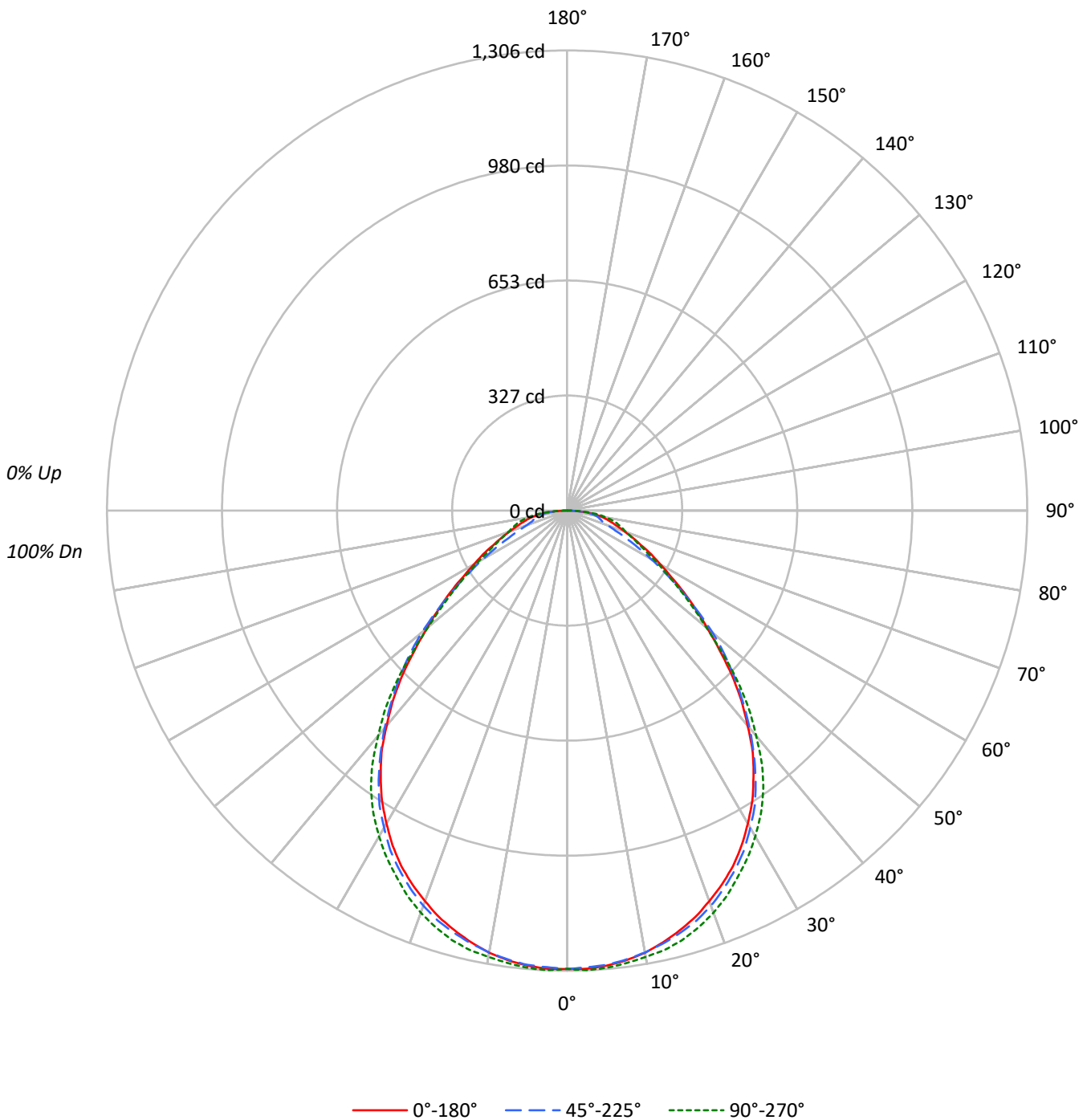
Input Watts (W): 22.134
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3501	3501	3501
5°	3502	3497	3518
10°	3481	3479	3514
15°	3437	3455	3516
20°	3377	3417	3478
25°	3306	3343	3404
30°	3186	3229	3318
35°	3030	3064	3188
40°	2801	2831	2931
45°	2516	2561	2602
50°	2175	2253	2153
55°	1898	1848	1824
60°	1644	1480	1580
65°	1469	1162	1419
70°	1363	962	1399
75°	1361	1017	1553
80°	1506	1280	1753
85°	1572	1389	1979



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	4.3
10°-20°	350.7	12.3
20°-30°	518.6	18.3
30°-40°	585.2	20.6
40°-50°	515.9	18.2
50°-60°	353.9	12.5
60°-70°	208.8	7.4
70°-80°	130.3	4.6
80°-90°	54.3	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°	992.4	34.9
0°-40°	1577.7	55.5
0°-60°	2447.5	86.1
0°-90°	2841.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2841.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1301	1301	1301	1301	1301	
5°	1296	1294	1294	1299	1302	123
15°	1234	1235	1240	1256	1262	348
25°	1113	1117	1126	1140	1146	511
35°	922	930	933	955	970	575
45°	661	664	673	677	684	508
55°	405	395	394	381	389	363
65°	231	203	182	211	223	232
75°	131	118	98	137	149	140
85°	51	48	45	59	64	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1301.1	1301.1	1301.1	1301.1	1301.1
2.5°	1301.7	1298.4	1297.1	1302.4	1305.7
5°	1296.4	1293.8	1294.5	1299.1	1302.4
7.5°	1287.2	1285.2	1285.2	1291.8	1295.1
10°	1274.0	1273.3	1273.3	1281.2	1285.9
12.5°	1255.5	1256.1	1258.8	1269.3	1277.3
15°	1233.6	1235.0	1240.3	1255.5	1262.1
17.5°	1209.8	1209.8	1220.4	1232.3	1240.3
20°	1179.4	1181.4	1193.3	1206.5	1214.5
22.5°	1148.4	1151.7	1161.6	1176.8	1184.1
25°	1113.3	1117.3	1125.9	1140.4	1146.4
27.5°	1072.3	1077.6	1086.9	1097.5	1110.0
30°	1025.4	1033.3	1039.3	1053.8	1067.7
32.5°	977.8	985.1	991.7	1006.9	1022.7
35°	922.3	930.2	932.8	955.3	970.5
37.5°	865.4	868.7	870.0	892.5	909.0
40°	797.3	803.9	805.9	823.7	834.3
42.5°	731.9	734.5	738.5	751.7	764.2
45°	661.1	664.4	673.0	677.0	683.6
47.5°	587.1	597.0	606.9	594.3	595.0
50°	519.6	527.6	538.1	514.3	514.3
52.5°	459.5	463.4	464.1	444.3	448.2
55°	404.6	394.7	394.0	380.8	388.7
57.5°	349.7	336.5	331.9	327.9	337.2
60°	305.4	281.6	275.0	281.0	293.5
62.5°	269.1	238.7	226.1	241.3	252.5
65°	230.7	203.0	182.5	210.9	222.8
67.5°	201.0	174.5	148.1	188.4	197.0
70°	173.2	152.7	122.3	171.2	177.8
72.5°	150.7	134.9	105.8	154.7	162.6
75°	130.9	117.7	97.8	136.9	149.4
77.5°	115.0	100.5	91.2	118.3	133.5
80°	97.2	82.6	82.6	99.2	113.1
82.5°	76.7	64.8	66.8	80.7	90.6
85°	50.9	47.6	45.0	58.8	64.1
87.5°	25.8	26.4	23.8	30.4	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)