

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: P292626

Luminaire Tested: **22GR-LD5-28-A19/156-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292626
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-28-A19/156-UNV-L93050-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2442.0 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

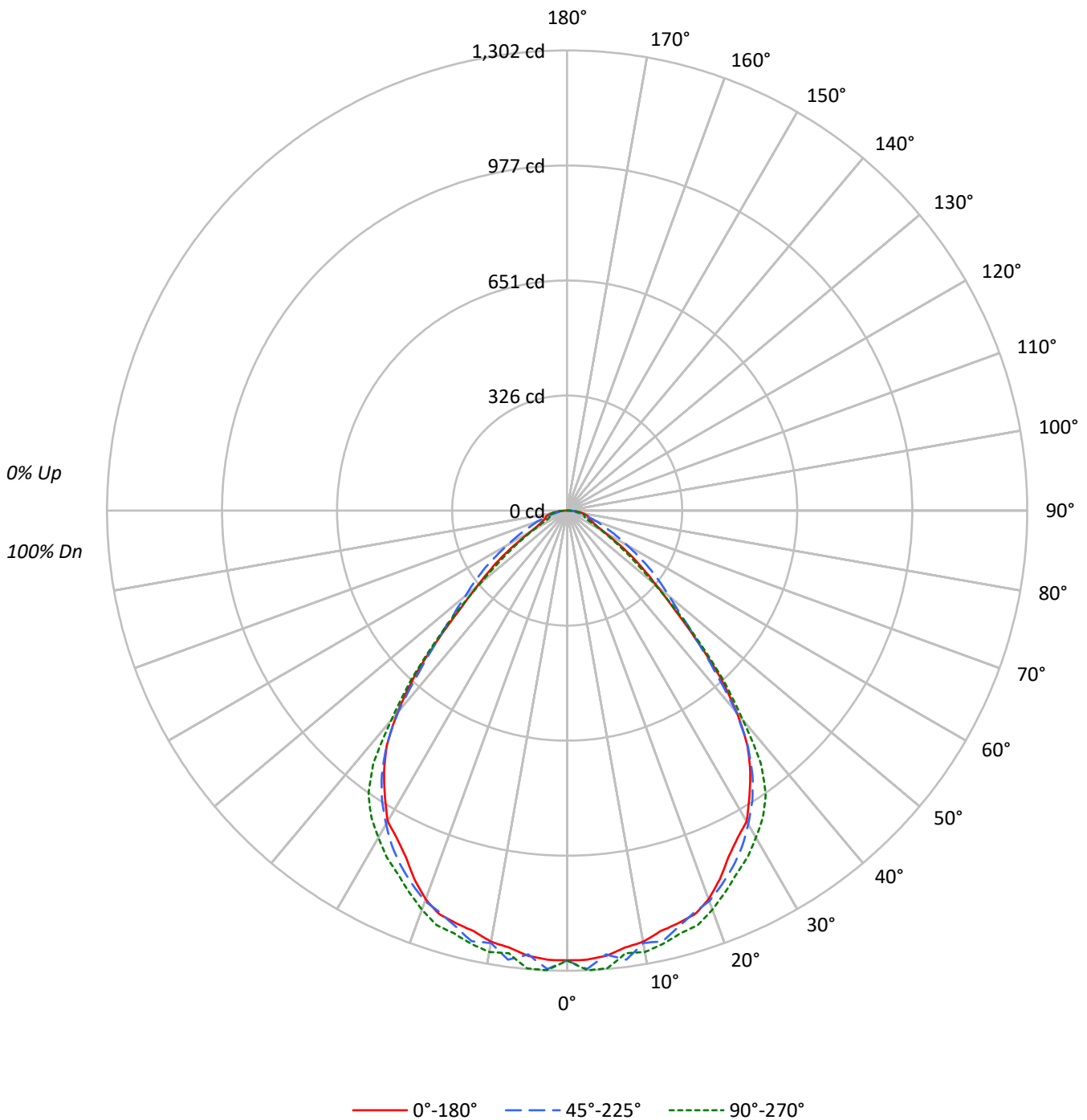
Input Watts (W): 22.506
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90					88				
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79					77				
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70					68				
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62					60				
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56					54				
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50					48				
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45					44				
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41					40				
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38					36				
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3425	3425	3425
5°	3416	3405	3512
10°	3385	3394	3465
15°	3369	3395	3450
20°	3351	3368	3440
25°	3208	3299	3367
30°	3155	3184	3320
35°	2967	3005	3219
40°	2629	2611	2714
45°	1964	1969	2023
50°	1383	1573	1339
55°	1020	1328	915
60°	638	1049	597
65°	520	832	418
70°	516	692	412
75°	640	508	532
80°	713	401	651
85°	710	747	729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.2	5.0
10°-20°	345.1	14.1
20°-30°	511.1	20.9
30°-40°	572.5	23.4
40°-50°	420.7	17.2
50°-60°	235.1	9.6
60°-70°	131.0	5.4
70°-80°	77.0	3.2
80°-90°	28.3	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°	977.3	40.0
0°-40°	1549.8	63.5
0°-60°	2205.6	90.3
0°-90°	2442.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2442.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1273	1273	1273	1273	1273	
5°	1265	1288	1261	1286	1300	120
15°	1209	1217	1219	1237	1238	342
25°	1080	1089	1111	1127	1134	501
35°	903	904	915	956	980	560
45°	516	558	517	554	532	403
55°	218	265	283	282	195	194
65°	82	145	131	167	66	84
75°	62	87	49	98	51	62
85°	23	34	24	31	24	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1272.7	1272.7	1272.7	1272.7	1272.7
2.5°	1272.1	1283.6	1298.6	1300.3	1301.5
5°	1264.6	1288.2	1260.6	1286.5	1300.3
7.5°	1247.4	1261.8	1281.9	1256.0	1263.5
10°	1238.8	1242.2	1242.2	1274.4	1268.1
12.5°	1219.2	1242.2	1248.0	1241.6	1255.4
15°	1209.4	1216.9	1218.6	1237.0	1238.2
17.5°	1198.5	1196.8	1192.7	1206.0	1229.6
20°	1170.3	1164.0	1176.0	1192.2	1201.4
22.5°	1128.9	1130.6	1145.0	1158.2	1168.6
25°	1080.5	1089.2	1111.0	1126.6	1134.0
27.5°	1044.3	1056.9	1071.9	1090.3	1105.3
30°	1015.5	1014.4	1024.7	1051.2	1068.4
32.5°	959.7	963.7	974.7	1006.3	1030.5
35°	903.3	903.9	914.8	956.3	979.8
37.5°	838.3	833.7	840.0	884.9	900.4
40°	748.5	749.7	743.4	775.0	772.7
42.5°	643.8	653.0	620.2	661.7	658.8
45°	516.1	558.1	517.3	554.1	531.6
47.5°	407.4	469.5	435.5	462.6	420.6
50°	330.3	394.1	375.7	387.8	319.9
52.5°	271.0	322.8	328.5	331.4	249.7
55°	217.5	264.7	283.1	282.5	195.0
57.5°	160.5	215.2	236.5	245.1	147.9
60°	118.5	178.9	195.0	214.0	111.0
62.5°	95.5	157.1	161.1	187.6	84.6
65°	81.7	145.0	130.6	167.4	65.6
67.5°	72.5	135.2	106.4	149.6	55.8
70°	65.6	120.3	88.0	134.1	52.4
72.5°	63.9	102.4	67.9	119.7	51.8
75°	61.6	86.9	48.9	98.4	51.2
77.5°	52.9	74.2	35.1	75.9	47.8
80°	46.0	59.3	25.9	57.0	42.0
82.5°	35.7	44.9	23.0	43.2	33.9
85°	23.0	33.9	24.2	31.1	23.6
87.5°	10.9	19.0	17.3	16.7	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)