

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: P292670

Luminaire Tested: **22GR-LD5-28-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292670
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-L92765-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: 2458.0 lumens
Efficiency: N/A
Efficacy: 111.0 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

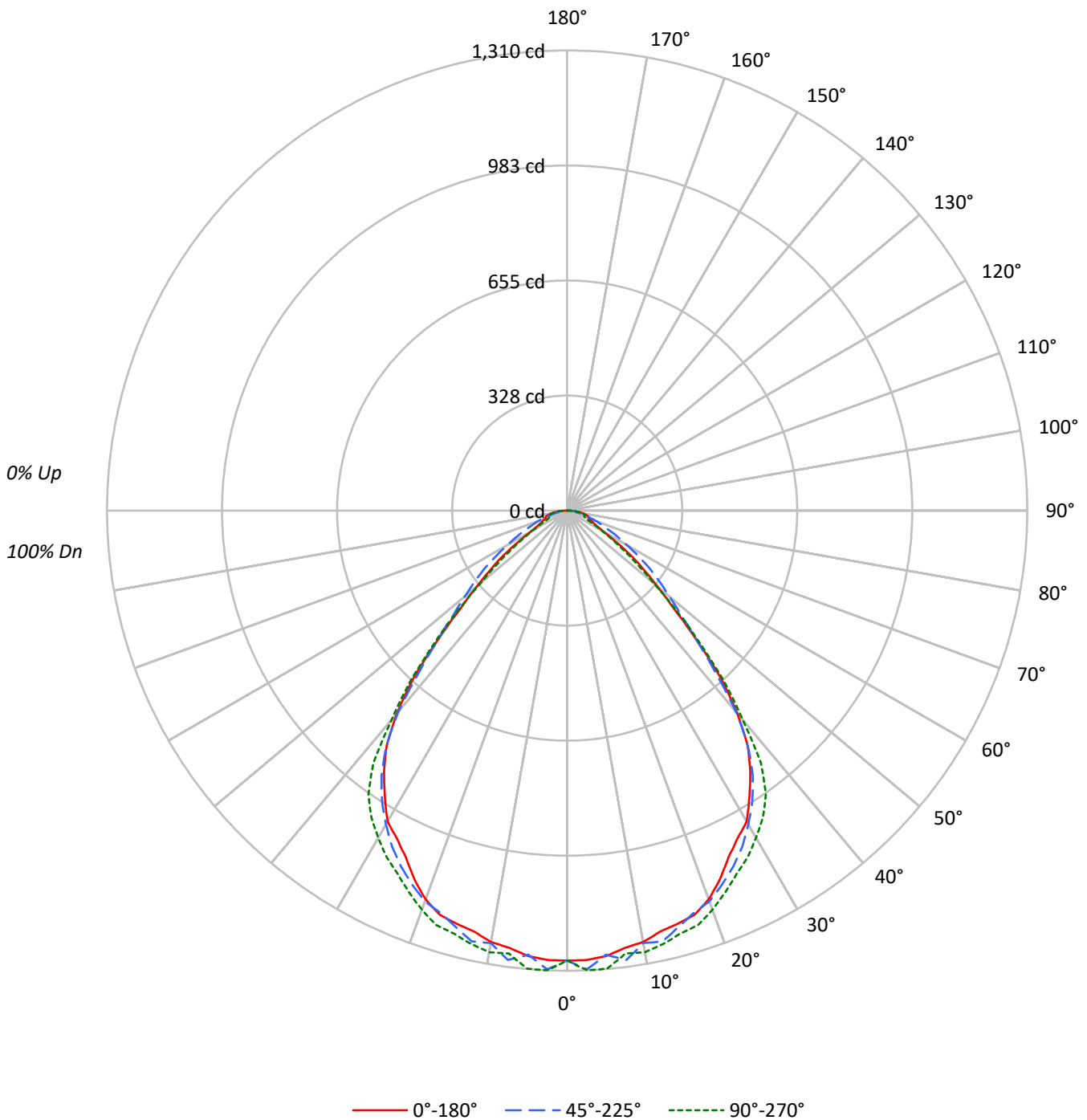
Input Watts (W): 22.134
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	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°	3447	3447	3447
5°	3438	3428	3535
10°	3407	3416	3488
15°	3391	3417	3472
20°	3373	3390	3463
25°	3229	3320	3389
30°	3176	3205	3342
35°	2987	3025	3240
40°	2647	2628	2732
45°	1977	1981	2036
50°	1392	1583	1348
55°	1027	1337	921
60°	642	1056	602
65°	523	837	420
70°	519	697	415
75°	645	512	535
80°	717	404	656
85°	716	750	732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.9	5.0
10°-20°	347.3	14.1
20°-30°	514.5	20.9
30°-40°	576.3	23.4
40°-50°	423.4	17.2
50°-60°	236.7	9.6
60°-70°	131.9	5.4
70°-80°	77.5	3.2
80°-90°	28.5	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°	983.7	40.0
0°-40°	1560.0	63.5
0°-60°	2220.1	90.3
0°-90°	2458.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2458.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1273	1297	1269	1295	1309	120
15°	1217	1225	1227	1245	1246	344
25°	1088	1096	1118	1134	1142	504
35°	909	910	921	962	986	563
45°	520	562	521	558	535	406
55°	219	266	285	284	196	195
65°	82	146	132	168	66	85
75°	62	87	49	99	52	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°	1281.0	1281.0	1281.0	1281.0	1281.0
2.5°	1280.5	1292.0	1307.1	1308.8	1310.0
5°	1272.9	1296.7	1268.9	1294.9	1308.8
7.5°	1255.6	1270.0	1290.3	1264.2	1271.8
10°	1246.9	1250.3	1250.3	1282.8	1276.4
12.5°	1227.2	1250.3	1256.1	1249.8	1263.7
15°	1217.3	1224.9	1226.6	1245.1	1246.3
17.5°	1206.3	1204.6	1200.5	1213.9	1237.6
20°	1178.0	1171.6	1183.7	1200.0	1209.2
22.5°	1136.3	1138.0	1152.5	1165.8	1176.2
25°	1087.6	1096.3	1118.3	1133.9	1141.5
27.5°	1051.1	1063.9	1078.9	1097.5	1112.5
30°	1022.2	1021.0	1031.4	1058.1	1075.4
32.5°	966.0	970.0	981.1	1012.9	1037.2
35°	909.2	909.8	920.8	962.5	986.3
37.5°	843.8	839.2	845.5	890.7	906.3
40°	753.5	754.6	748.2	780.1	777.8
42.5°	648.0	657.3	624.3	666.0	663.1
45°	519.5	561.8	520.6	557.7	535.1
47.5°	410.0	472.6	438.4	465.6	423.3
50°	332.4	396.7	378.2	390.3	322.0
52.5°	272.8	324.9	330.7	333.6	251.3
55°	218.9	266.4	284.9	284.4	196.3
57.5°	161.6	216.6	238.0	246.7	148.8
60°	119.3	180.1	196.3	215.4	111.8
62.5°	96.1	158.1	162.2	188.8	85.1
65°	82.2	145.9	131.5	168.5	66.0
67.5°	73.0	136.1	107.1	150.6	56.2
70°	66.0	121.0	88.6	134.9	52.7
72.5°	64.3	103.1	68.3	120.5	52.1
75°	62.0	87.4	49.2	99.0	51.5
77.5°	53.3	74.7	35.3	76.4	48.1
80°	46.3	59.7	26.1	57.3	42.3
82.5°	35.9	45.2	23.2	43.4	34.2
85°	23.2	34.2	24.3	31.3	23.7
87.5°	11.0	19.1	17.4	16.8	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)