

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: P292678

Luminaire Tested: **22GR-LD5-32-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292678  
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-LD5-32-A19/156-UNV-L92765-W2A1-U-3000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2586.0 lumens  
Efficiency: N/A  
Efficacy: 106.1 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

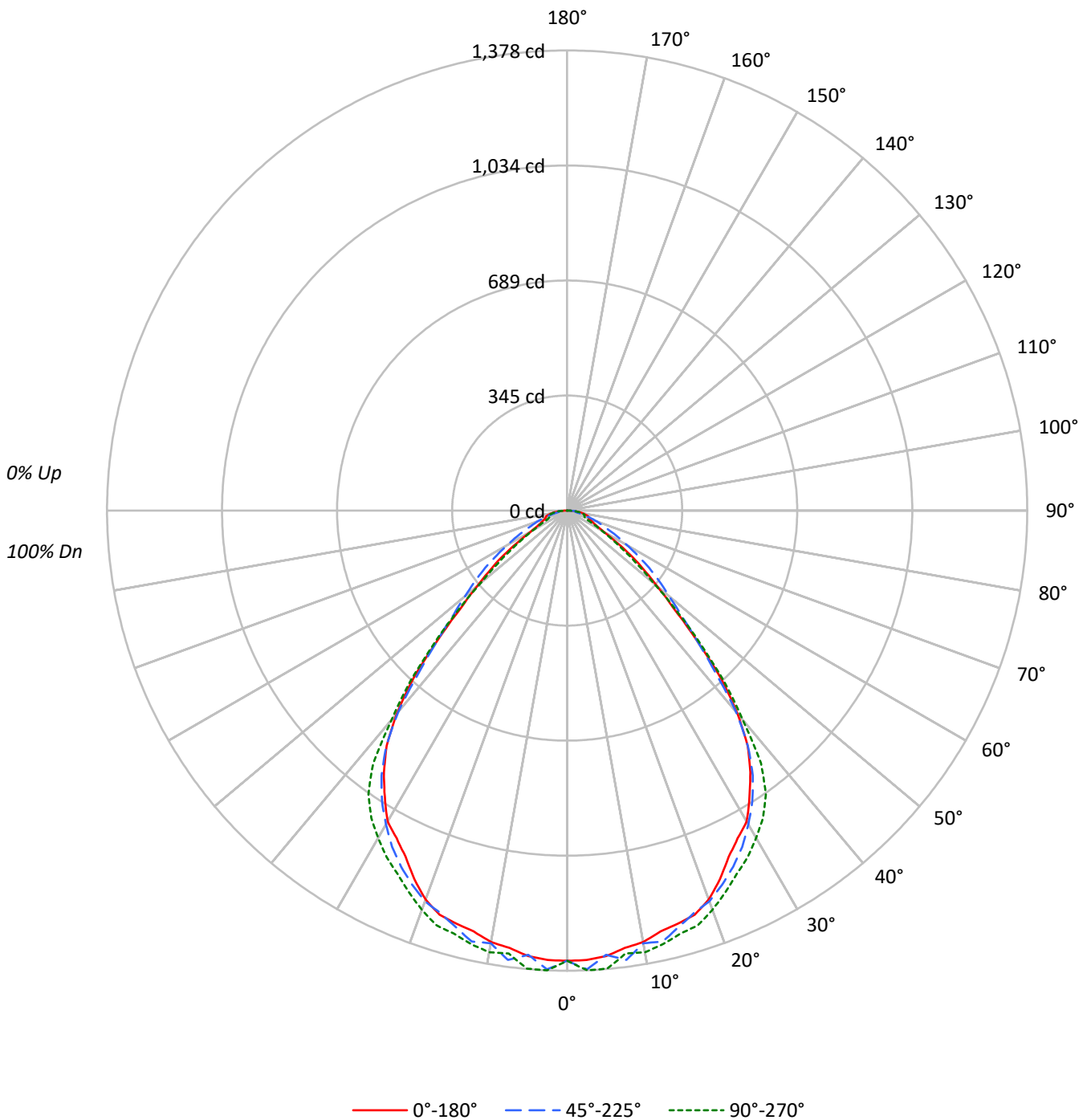
Input Watts (W): 24.366  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3627	3627	3627
5°	3618	3606	3720
10°	3584	3595	3669
15°	3568	3595	3653
20°	3549	3566	3643
25°	3397	3493	3566
30°	3342	3372	3516
35°	3143	3183	3409
40°	2785	2765	2875
45°	2080	2085	2143
50°	1464	1666	1418
55°	1080	1407	969
60°	675	1111	633
65°	551	881	443
70°	547	733	436
75°	678	539	564
80°	755	425	690
85°	753	790	772



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.3	5.0
10°-20°	365.4	14.1
20°-30°	541.2	20.9
30°-40°	606.3	23.4
40°-50°	445.5	17.2
50°-60°	249.0	9.6
60°-70°	138.8	5.4
70°-80°	81.5	3.2
80°-90°	30.0	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°	1035.0	40.0
0°-40°	1641.2	63.5
0°-60°	2335.7	90.3
0°-90°	2586.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2586.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1339	1364	1335	1362	1377	127
15°	1281	1289	1290	1310	1311	362
25°	1144	1153	1176	1193	1201	530
35°	957	957	969	1013	1038	593
45°	546	591	548	587	563	427
55°	230	280	300	299	206	205
65°	86	154	138	177	70	89
75°	65	92	52	104	54	66
85°	24	36	26	33	25	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1347.8	1347.8	1347.8	1347.8	1347.8
2.5°	1347.1	1359.3	1375.2	1377.0	1378.2
5°	1339.2	1364.2	1335.0	1362.4	1377.0
7.5°	1320.9	1336.2	1357.5	1330.1	1338.0
10°	1311.8	1315.5	1315.5	1349.6	1342.9
12.5°	1291.1	1315.5	1321.6	1314.8	1329.5
15°	1280.7	1288.7	1290.5	1310.0	1311.2
17.5°	1269.2	1267.3	1263.1	1277.1	1302.1
20°	1239.3	1232.6	1245.4	1262.5	1272.2
22.5°	1195.4	1197.3	1212.5	1226.5	1237.5
25°	1144.2	1153.4	1176.5	1193.0	1200.9
27.5°	1105.9	1119.3	1135.1	1154.6	1170.4
30°	1075.4	1074.2	1085.1	1113.2	1131.5
32.5°	1016.3	1020.6	1032.1	1065.6	1091.2
35°	956.6	957.2	968.8	1012.6	1037.6
37.5°	887.7	882.9	889.6	937.1	953.5
40°	792.7	793.9	787.2	820.7	818.3
42.5°	681.8	691.5	656.8	700.7	697.6
45°	546.5	591.0	547.8	586.7	563.0
47.5°	431.4	497.2	461.2	489.9	445.4
50°	349.7	417.4	397.9	410.7	338.8
52.5°	287.0	341.8	347.9	351.0	264.4
55°	230.3	280.3	299.8	299.2	206.5
57.5°	170.0	227.9	250.4	259.6	156.6
60°	125.5	189.5	206.5	226.7	117.6
62.5°	101.1	166.3	170.6	198.6	89.6
65°	86.5	153.5	138.3	177.3	69.5
67.5°	76.8	143.2	112.7	158.4	59.1
70°	69.5	127.3	93.2	142.0	55.4
72.5°	67.6	108.5	71.9	126.7	54.8
75°	65.2	92.0	51.8	104.2	54.2
77.5°	56.1	78.6	37.2	80.4	50.6
80°	48.7	62.8	27.4	60.3	44.5
82.5°	37.8	47.5	24.4	45.7	35.9
85°	24.4	35.9	25.6	32.9	25.0
87.5°	11.6	20.1	18.3	17.7	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)