

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: P292686

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292686  
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-LD5-36-A19/156-UNV-L92765-W2A1-U-2700K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2792.0 lumens  
Efficiency: N/A  
Efficacy: 99.7 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

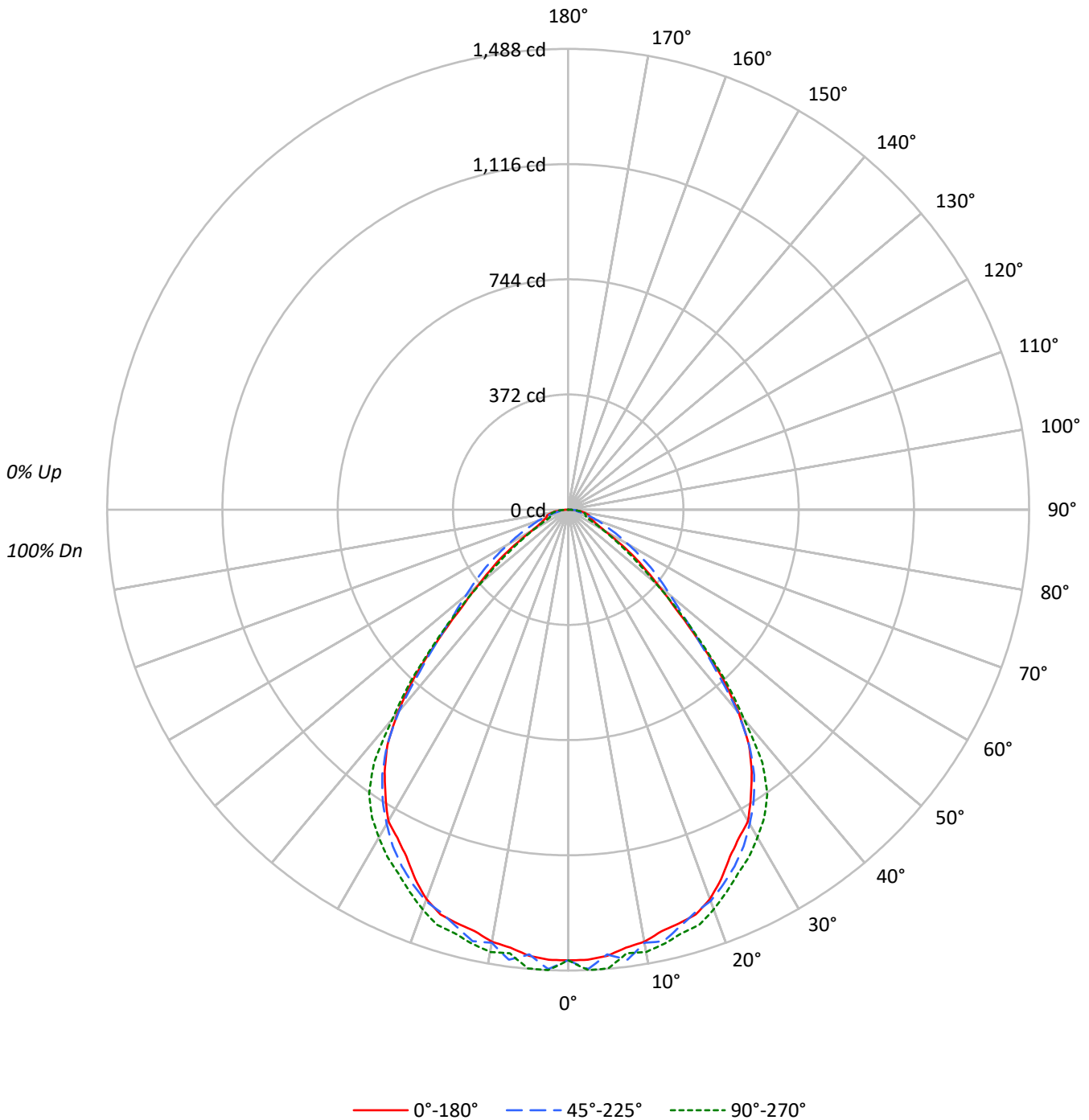
Input Watts (W): 27.993  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3916	3916	3916
5°	3906	3893	4016
10°	3870	3881	3962
15°	3852	3882	3944
20°	3832	3851	3933
25°	3668	3772	3850
30°	3608	3640	3796
35°	3393	3436	3680
40°	3006	2986	3104
45°	2246	2251	2313
50°	1581	1798	1531
55°	1167	1519	1046
60°	729	1200	684
65°	595	951	478
70°	590	792	471
75°	732	581	608
80°	815	459	744
85°	812	852	834



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.5	5.0
10°-20°	394.5	14.1
20°-30°	584.4	20.9
30°-40°	654.6	23.4
40°-50°	481.0	17.2
50°-60°	268.8	9.6
60°-70°	149.8	5.4
70°-80°	88.0	3.2
80°-90°	32.3	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°	1117.4	40.0
0°-40°	1772.0	63.5
0°-60°	2521.8	90.3
0°-90°	2792.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2792.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1455	1455	1455	1455	1455	
5°	1446	1473	1441	1471	1487	137
15°	1383	1391	1393	1414	1416	391
25°	1235	1245	1270	1288	1297	573
35°	1033	1033	1046	1093	1120	640
45°	590	638	591	634	608	461
55°	249	303	324	323	223	222
65°	93	166	149	191	75	97
75°	70	99	56	112	58	71
85°	26	39	28	36	27	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1455.1	1455.1	1455.1	1455.1	1455.1
2.5°	1454.5	1467.6	1484.7	1486.7	1488.0
5°	1445.9	1472.9	1441.3	1470.9	1486.7
7.5°	1426.2	1442.6	1465.6	1436.0	1444.6
10°	1416.3	1420.2	1420.2	1457.1	1449.9
12.5°	1393.9	1420.2	1426.8	1419.6	1435.4
15°	1382.8	1391.3	1393.3	1414.3	1415.6
17.5°	1370.3	1368.3	1363.7	1378.8	1405.8
20°	1338.0	1330.8	1344.6	1363.0	1373.5
22.5°	1290.7	1292.6	1309.1	1324.2	1336.0
25°	1235.4	1245.3	1270.3	1288.0	1296.6
27.5°	1194.0	1208.4	1225.5	1246.6	1263.7
30°	1161.1	1159.7	1171.6	1201.8	1221.6
32.5°	1097.3	1101.9	1114.4	1150.5	1178.2
35°	1032.8	1033.4	1045.9	1093.3	1120.3
37.5°	958.5	953.2	960.4	1011.7	1029.5
40°	855.8	857.1	849.9	886.1	883.5
42.5°	736.1	746.6	709.1	756.5	753.2
45°	590.1	638.1	591.4	633.5	607.8
47.5°	465.7	536.8	498.0	528.9	480.9
50°	377.6	450.6	429.6	443.4	365.8
52.5°	309.8	369.0	375.6	378.9	285.5
55°	248.7	302.6	323.7	323.0	223.0
57.5°	183.5	246.0	270.4	280.2	169.1
60°	135.5	204.6	223.0	244.7	127.0
62.5°	109.2	179.6	184.2	214.5	96.7
65°	93.4	165.8	149.3	191.4	75.0
67.5°	82.9	154.6	121.7	171.0	63.8
70°	75.0	137.5	100.6	153.3	59.9
72.5°	73.0	117.1	77.6	136.8	59.2
75°	70.4	99.3	55.9	112.5	58.5
77.5°	60.5	84.9	40.1	86.8	54.6
80°	52.6	67.8	29.6	65.1	48.0
82.5°	40.8	51.3	26.3	49.3	38.8
85°	26.3	38.8	27.6	35.5	27.0
87.5°	12.5	21.7	19.7	19.1	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)