

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: P292650

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292650
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-LD5-20-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: 1604.0 lumens
Efficiency: N/A
Efficacy: 103.9 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

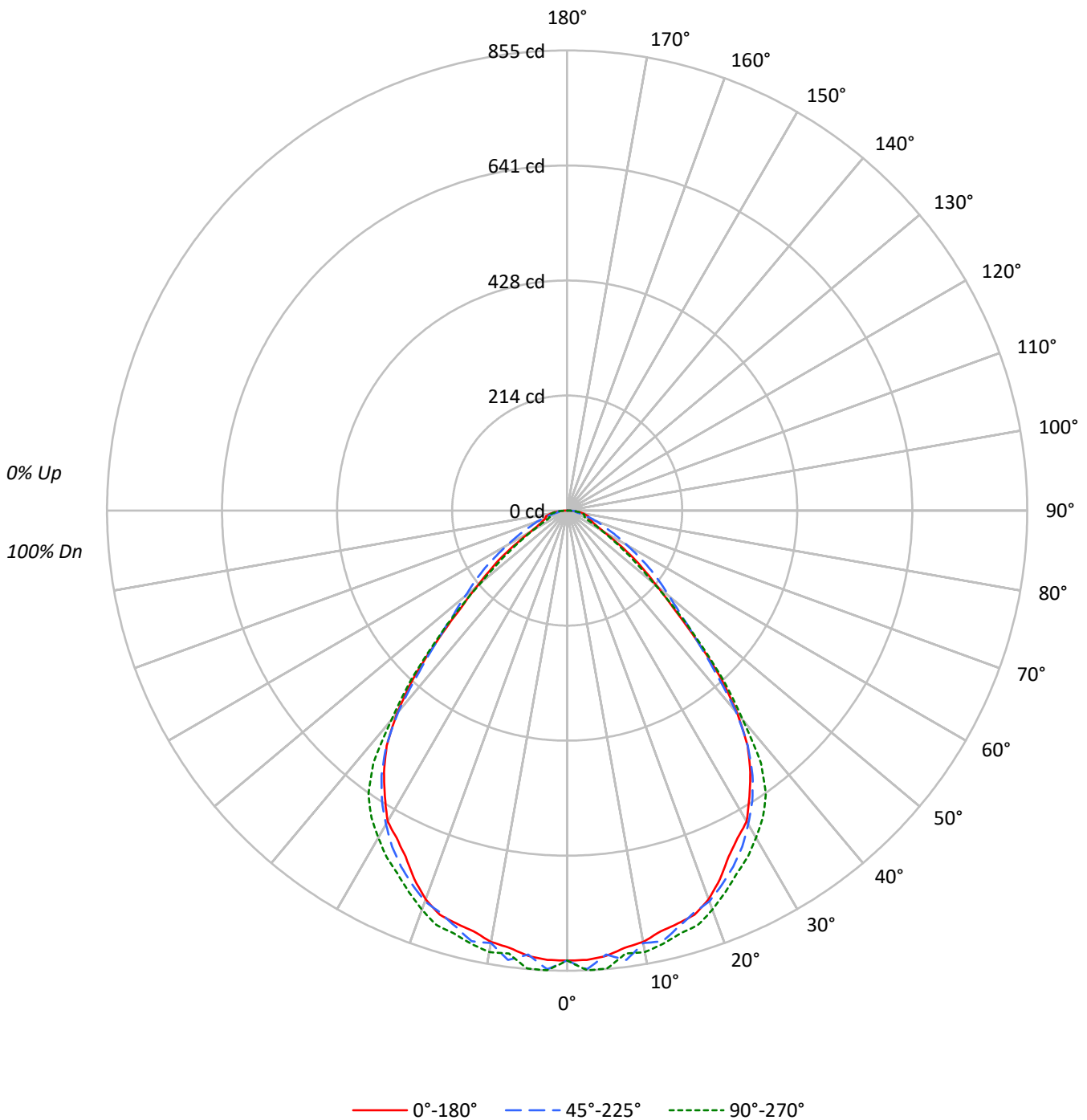
Input Watts (W): 15.438
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2250	2250	2250
5°	2244	2237	2307
10°	2223	2229	2276
15°	2213	2230	2266
20°	2201	2212	2260
25°	2107	2167	2212
30°	2073	2092	2181
35°	1949	1974	2114
40°	1727	1715	1783
45°	1290	1293	1329
50°	908	1033	880
55°	670	872	601
60°	419	689	392
65°	342	546	274
70°	339	455	271
75°	420	334	349
80°	468	263	428
85°	466	491	479



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.6	5.0
10°-20°	226.7	14.1
20°-30°	335.7	20.9
30°-40°	376.0	23.4
40°-50°	276.3	17.2
50°-60°	154.4	9.6
60°-70°	86.1	5.4
70°-80°	50.6	3.2
80°-90°	18.6	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°	642.0	40.0
0°-40°	1018.0	63.5
0°-60°	1448.8	90.3
0°-90°	1604.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1604.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	831	846	828	845	854	79
15°	794	799	800	812	813	224
25°	710	715	730	740	745	329
35°	593	594	601	628	644	368
45°	339	367	340	364	349	265
55°	143	174	186	186	128	127
65°	54	95	86	110	43	56
75°	40	57	32	65	34	41
85°	15	22	16	20	16	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	836.0	836.0	836.0	836.0	836.0
2.5°	835.6	843.1	853.0	854.1	854.9
5°	830.7	846.2	828.0	845.0	854.1
7.5°	819.3	828.8	842.0	825.0	829.9
10°	813.7	815.9	815.9	837.1	832.9
12.5°	800.8	815.9	819.7	815.6	824.6
15°	794.4	799.3	800.4	812.5	813.3
17.5°	787.2	786.1	783.4	792.1	807.6
20°	768.7	764.5	772.5	783.1	789.1
22.5°	741.5	742.6	752.1	760.8	767.6
25°	709.7	715.4	729.8	740.0	744.9
27.5°	685.9	694.2	704.1	716.2	726.0
30°	667.0	666.3	673.1	690.5	701.8
32.5°	630.4	633.0	640.2	661.0	676.9
35°	593.3	593.7	600.9	628.1	643.6
37.5°	550.6	547.6	551.8	581.2	591.4
40°	491.7	492.4	488.3	509.1	507.5
42.5°	422.9	428.9	407.4	434.6	432.7
45°	339.0	366.6	339.8	363.9	349.2
47.5°	267.6	308.4	286.1	303.8	276.3
50°	216.9	258.9	246.8	254.7	210.1
52.5°	178.0	212.0	215.8	217.7	164.0
55°	142.9	173.8	185.9	185.6	128.1
57.5°	105.4	141.3	155.3	161.0	97.1
60°	77.9	117.5	128.1	140.6	72.9
62.5°	62.7	103.2	105.8	123.2	55.6
65°	53.7	95.2	85.8	110.0	43.1
67.5°	47.6	88.8	69.9	98.3	36.7
70°	43.1	79.0	57.8	88.1	34.4
72.5°	41.9	67.3	44.6	78.6	34.0
75°	40.4	57.1	32.1	64.6	33.6
77.5°	34.8	48.8	23.1	49.9	31.4
80°	30.2	38.9	17.0	37.4	27.6
82.5°	23.4	29.5	15.1	28.3	22.3
85°	15.1	22.3	15.9	20.4	15.5
87.5°	7.2	12.5	11.3	11.0	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)