

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: P292651

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292651
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-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: 1668.0 lumens
Efficiency: N/A
Efficacy: 109.4 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

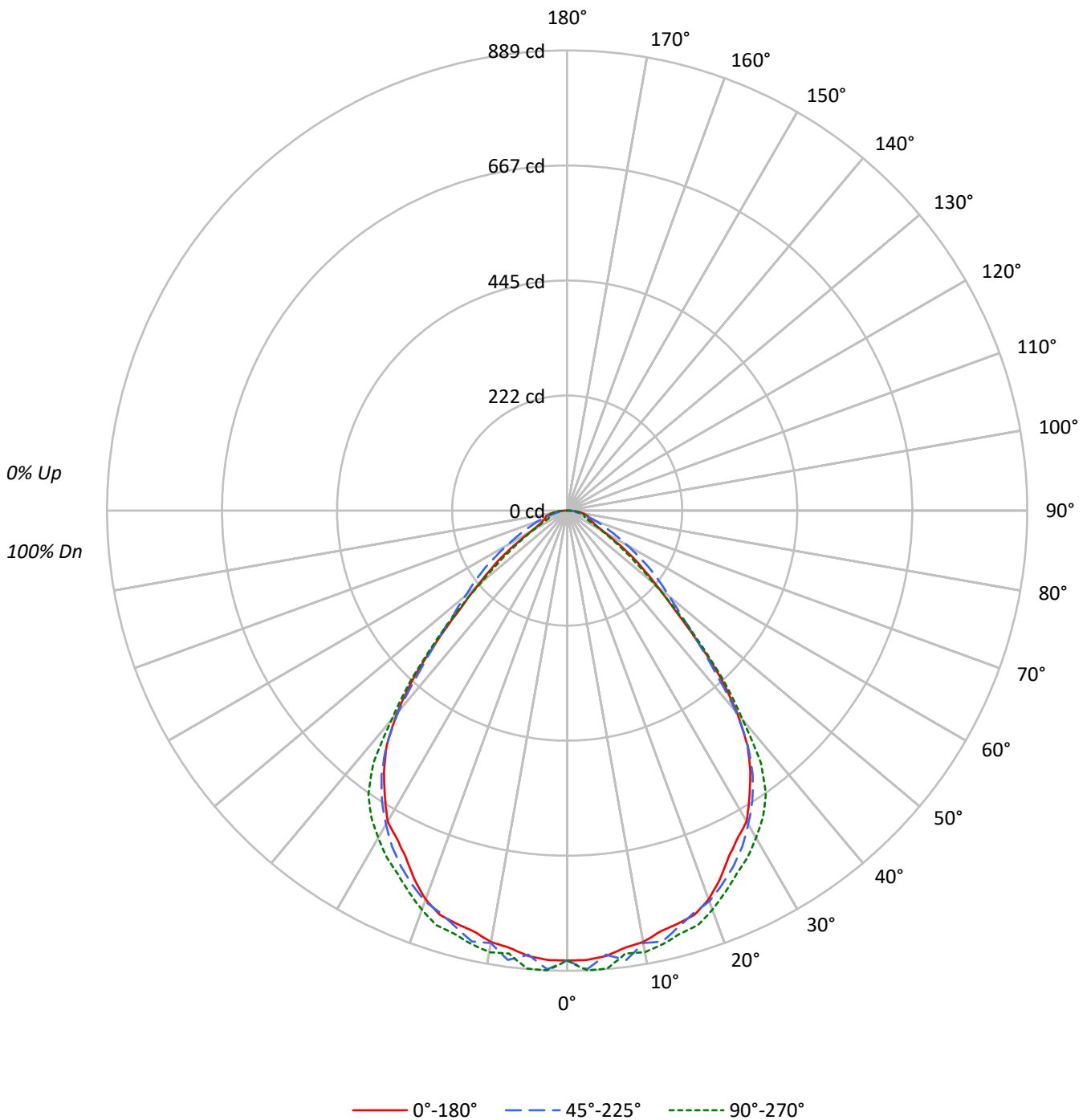
Input Watts (W): 15.252
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2339	2339	2339
5°	2333	2326	2399
10°	2312	2319	2367
15°	2301	2319	2356
20°	2289	2300	2350
25°	2192	2253	2300
30°	2155	2175	2268
35°	2027	2053	2199
40°	1796	1784	1854
45°	1341	1345	1382
50°	944	1074	915
55°	697	907	625
60°	436	717	408
65°	355	568	285
70°	352	473	282
75°	438	347	364
80°	487	274	445
85°	485	509	497



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.8	5.0
10°-20°	235.7	14.1
20°-30°	349.1	20.9
30°-40°	391.1	23.4
40°-50°	287.3	17.2
50°-60°	160.6	9.6
60°-70°	89.5	5.4
70°-80°	52.6	3.2
80°-90°	19.3	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°	667.6	40.0
0°-40°	1058.6	63.5
0°-60°	1506.6	90.3
0°-90°	1668.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1668.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	869	869	869	869	869	
5°	864	880	861	879	888	82
15°	826	831	832	845	846	233
25°	738	744	759	770	775	342
35°	617	617	625	653	669	382
45°	352	381	353	378	363	275
55°	149	181	193	193	133	133
65°	56	99	89	114	45	58
75°	42	59	33	67	35	42
85°	16	23	16	21	16	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	869.3	869.3	869.3	869.3	869.3
2.5°	868.9	876.8	887.0	888.2	889.0
5°	863.8	879.9	861.1	878.7	888.2
7.5°	852.0	861.8	875.6	857.9	863.0
10°	846.1	848.5	848.5	870.5	866.2
12.5°	832.8	848.5	852.4	848.1	857.5
15°	826.1	831.2	832.4	844.9	845.7
17.5°	818.6	817.4	814.7	823.7	839.8
20°	799.4	795.0	803.3	814.3	820.6
22.5°	771.1	772.2	782.1	791.1	798.2
25°	738.1	743.9	758.9	769.5	774.6
27.5°	713.3	721.9	732.2	744.7	755.0
30°	693.6	692.9	699.9	718.0	729.8
32.5°	655.5	658.3	665.7	687.4	703.9
35°	617.0	617.4	624.9	653.2	669.3
37.5°	572.6	569.5	573.8	604.4	615.0
40°	511.3	512.1	507.8	529.4	527.8
42.5°	439.8	446.1	423.7	451.9	450.0
45°	352.5	381.2	353.3	378.5	363.1
47.5°	278.2	320.7	297.5	316.0	287.3
50°	225.6	269.2	256.6	264.9	218.5
52.5°	185.1	220.5	224.4	226.4	170.6
55°	148.6	180.8	193.4	193.0	133.2
57.5°	109.6	147.0	161.5	167.4	101.0
60°	81.0	122.2	133.2	146.2	75.8
62.5°	65.2	107.3	110.0	128.1	57.8
65°	55.8	99.0	89.2	114.4	44.8
67.5°	49.5	92.4	72.7	102.2	38.1
70°	44.8	82.1	60.1	91.6	35.8
72.5°	43.6	70.0	46.4	81.7	35.4
75°	42.1	59.3	33.4	67.2	35.0
77.5°	36.2	50.7	24.0	51.9	32.6
80°	31.4	40.5	17.7	38.9	28.7
82.5°	24.4	30.7	15.7	29.5	23.2
85°	15.7	23.2	16.5	21.2	16.1
87.5°	7.5	13.0	11.8	11.4	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)