

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: P292617

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292617
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-L93050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1880.0 lumens
Efficiency: N/A
Efficacy: 118.9 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

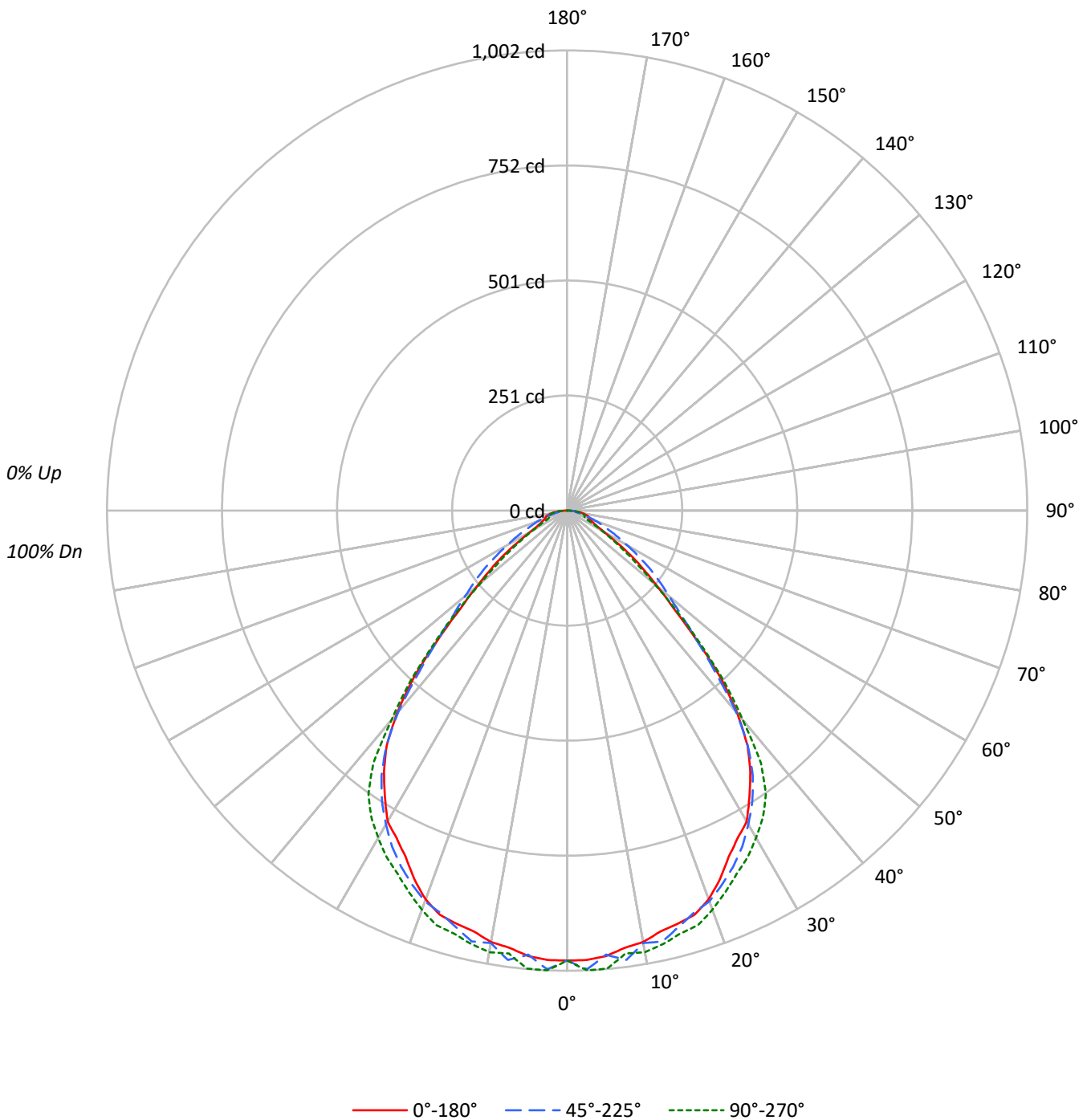
Input Watts (W): 15.81
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2637	2637	2637
5°	2630	2622	2704
10°	2606	2613	2668
15°	2594	2614	2656
20°	2580	2593	2649
25°	2470	2540	2592
30°	2429	2451	2556
35°	2284	2314	2478
40°	2024	2010	2090
45°	1512	1515	1558
50°	1065	1211	1031
55°	785	1022	705
60°	491	808	460
65°	401	640	322
70°	397	533	317
75°	493	392	410
80°	549	308	501
85°	546	574	562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.3	5.0
10°-20°	265.7	14.1
20°-30°	393.5	20.9
30°-40°	440.8	23.4
40°-50°	323.9	17.2
50°-60°	181.0	9.6
60°-70°	100.9	5.4
70°-80°	59.3	3.2
80°-90°	21.8	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°	752.4	40.0
0°-40°	1193.2	63.5
0°-60°	1698.1	90.3
0°-90°	1880.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1880.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	980	980	980	980	980	
5°	974	992	970	990	1001	92
15°	931	937	938	952	953	263
25°	832	838	855	867	873	386
35°	695	696	704	736	754	431
45°	397	430	398	427	409	310
55°	167	204	218	218	150	149
65°	63	112	100	129	50	65
75°	47	67	38	76	39	48
85°	18	26	19	24	18	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	979.8	979.8	979.8	979.8	979.8
2.5°	979.4	988.2	999.7	1001.1	1002.0
5°	973.6	991.8	970.5	990.4	1001.1
7.5°	960.3	971.4	986.9	967.0	972.7
10°	953.7	956.3	956.3	981.1	976.3
12.5°	938.6	956.3	960.8	955.9	966.5
15°	931.1	936.8	938.2	952.3	953.2
17.5°	922.7	921.3	918.2	928.4	946.6
20°	901.0	896.1	905.4	917.8	924.9
22.5°	869.1	870.4	881.5	891.7	899.6
25°	831.9	838.5	855.3	867.3	873.1
27.5°	804.0	813.7	825.2	839.4	850.9
30°	781.8	780.9	788.9	809.3	822.6
32.5°	738.8	741.9	750.4	774.7	793.3
35°	695.4	695.9	704.3	736.2	754.3
37.5°	645.4	641.8	646.7	681.3	693.2
40°	576.3	577.2	572.3	596.7	594.9
42.5°	495.7	502.7	477.5	509.4	507.2
45°	397.3	429.7	398.2	426.6	409.3
47.5°	313.6	361.4	335.3	356.1	323.8
50°	254.3	303.4	289.2	298.5	246.3
52.5°	208.6	248.5	252.9	255.1	192.2
55°	167.4	203.8	217.9	217.5	150.2
57.5°	123.6	165.7	182.1	188.7	113.8
60°	91.2	137.8	150.2	164.8	85.5
62.5°	73.5	120.9	124.0	144.4	65.1
65°	62.9	111.6	100.5	128.9	50.5
67.5°	55.8	104.1	81.9	115.2	43.0
70°	50.5	92.6	67.8	103.2	40.3
72.5°	49.2	78.8	52.3	92.1	39.9
75°	47.4	66.9	37.7	75.7	39.4
77.5°	40.8	57.1	27.0	58.5	36.8
80°	35.4	45.6	19.9	43.9	32.3
82.5°	27.5	34.6	17.7	33.2	26.1
85°	17.7	26.1	18.6	23.9	18.2
87.5°	8.4	14.6	13.3	12.8	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)