

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: P292620

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292620
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-LD5-24-A19/156-UNV-L93050-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: 1869.0 lumens
Efficiency: N/A
Efficacy: 101.0 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

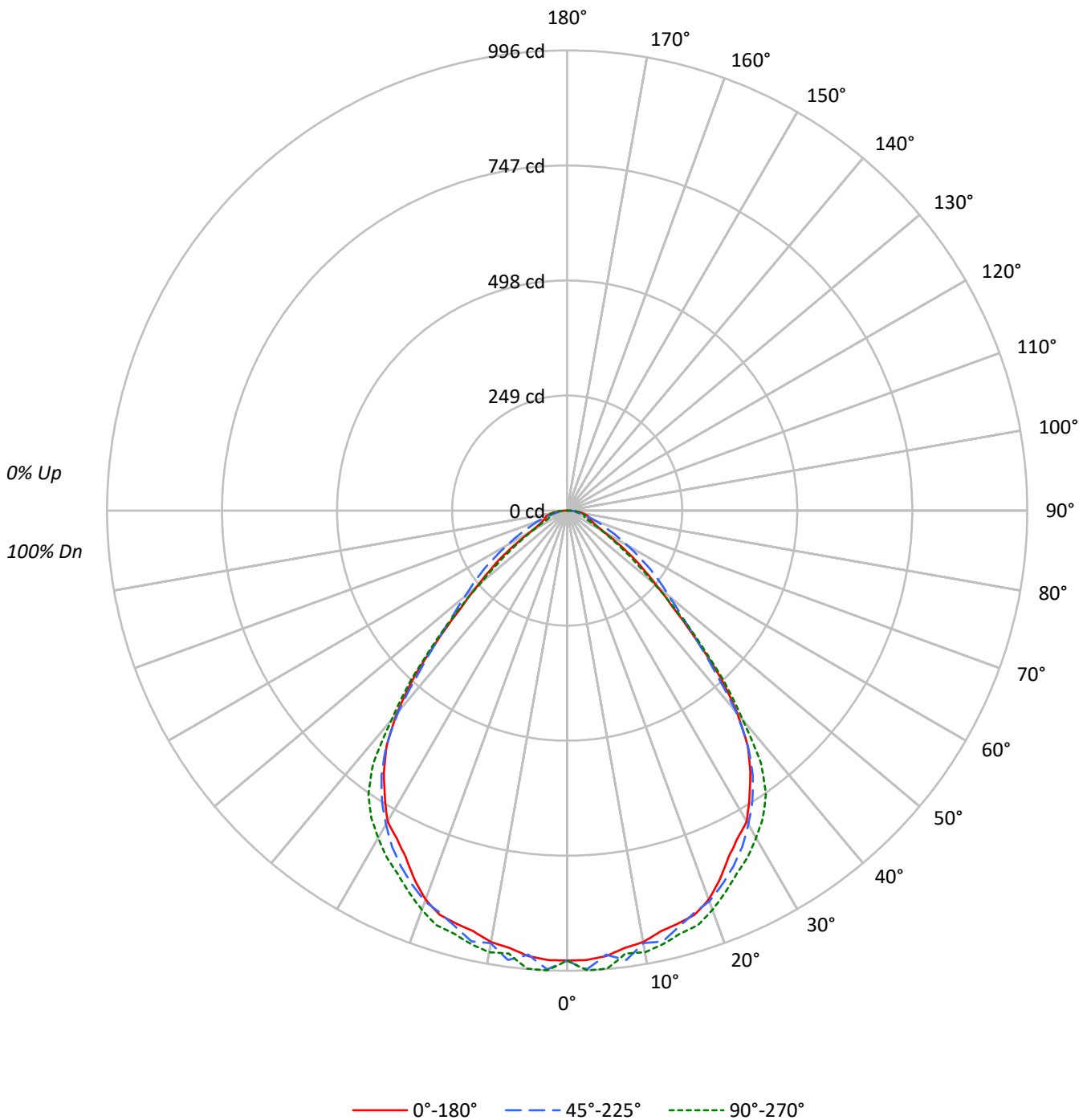
Input Watts (W): 18.507
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2621	2621	2621
5°	2615	2606	2688
10°	2591	2598	2652
15°	2579	2598	2640
20°	2565	2578	2633
25°	2456	2525	2577
30°	2415	2437	2541
35°	2271	2300	2463
40°	2012	1998	2077
45°	1503	1507	1549
50°	1058	1204	1025
55°	781	1017	700
60°	488	804	457
65°	398	637	320
70°	395	530	316
75°	490	389	408
80°	545	307	497
85°	543	571	559



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.7	5.0
10°-20°	264.1	14.1
20°-30°	391.2	20.9
30°-40°	438.2	23.4
40°-50°	322.0	17.2
50°-60°	180.0	9.6
60°-70°	100.3	5.4
70°-80°	58.9	3.2
80°-90°	21.7	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°	748.0	40.0
0°-40°	1186.2	63.5
0°-60°	1688.1	90.3
0°-90°	1869.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1869.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	968	986	965	985	995	92
15°	926	931	933	947	948	261
25°	827	834	850	862	868	383
35°	691	692	700	732	750	428
45°	395	427	396	424	407	309
55°	166	203	217	216	149	149
65°	62	111	100	128	50	65
75°	47	66	37	75	39	47
85°	18	26	18	24	18	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	974.1	974.1	974.1	974.1	974.1
2.5°	973.6	982.4	993.9	995.2	996.1
5°	967.9	986.0	964.8	984.6	995.2
7.5°	954.7	965.7	981.1	961.3	967.0
10°	948.1	950.7	950.7	975.4	970.5
12.5°	933.1	950.7	955.1	950.3	960.9
15°	925.6	931.4	932.7	946.8	947.6
17.5°	917.3	915.9	912.9	923.0	941.0
20°	895.7	890.8	900.1	912.4	919.5
22.5°	864.0	865.3	876.3	886.4	894.4
25°	827.0	833.6	850.3	862.2	867.9
27.5°	799.2	808.9	820.4	834.5	845.9
30°	777.2	776.4	784.3	804.5	817.7
32.5°	734.5	737.6	746.0	770.2	788.7
35°	691.4	691.8	700.2	731.9	749.9
37.5°	641.6	638.1	642.9	677.3	689.2
40°	572.9	573.8	568.9	593.2	591.4
42.5°	492.8	499.8	474.7	506.4	504.2
45°	395.0	427.1	395.9	424.1	406.9
47.5°	311.8	359.3	333.4	354.0	321.9
50°	252.8	301.6	287.6	296.8	244.8
52.5°	207.4	247.0	251.4	253.6	191.1
55°	166.5	202.6	216.7	216.2	149.3
57.5°	122.9	164.7	181.0	187.6	113.2
60°	90.7	137.0	149.3	163.8	85.0
62.5°	73.1	120.2	123.3	143.6	64.7
65°	62.5	111.0	100.0	128.1	50.2
67.5°	55.5	103.5	81.5	114.5	42.7
70°	50.2	92.0	67.4	102.6	40.1
72.5°	48.9	78.4	52.0	91.6	39.6
75°	47.1	66.5	37.4	75.3	39.2
77.5°	40.5	56.8	26.9	58.1	36.5
80°	35.2	45.4	19.8	43.6	32.1
82.5°	27.3	34.3	17.6	33.0	26.0
85°	17.6	26.0	18.5	23.8	18.1
87.5°	8.4	14.5	13.2	12.8	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)