

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: P292230

Luminaire Tested: **22GR-LD5-24-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292230
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-A-UNV-L93050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2233.0 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

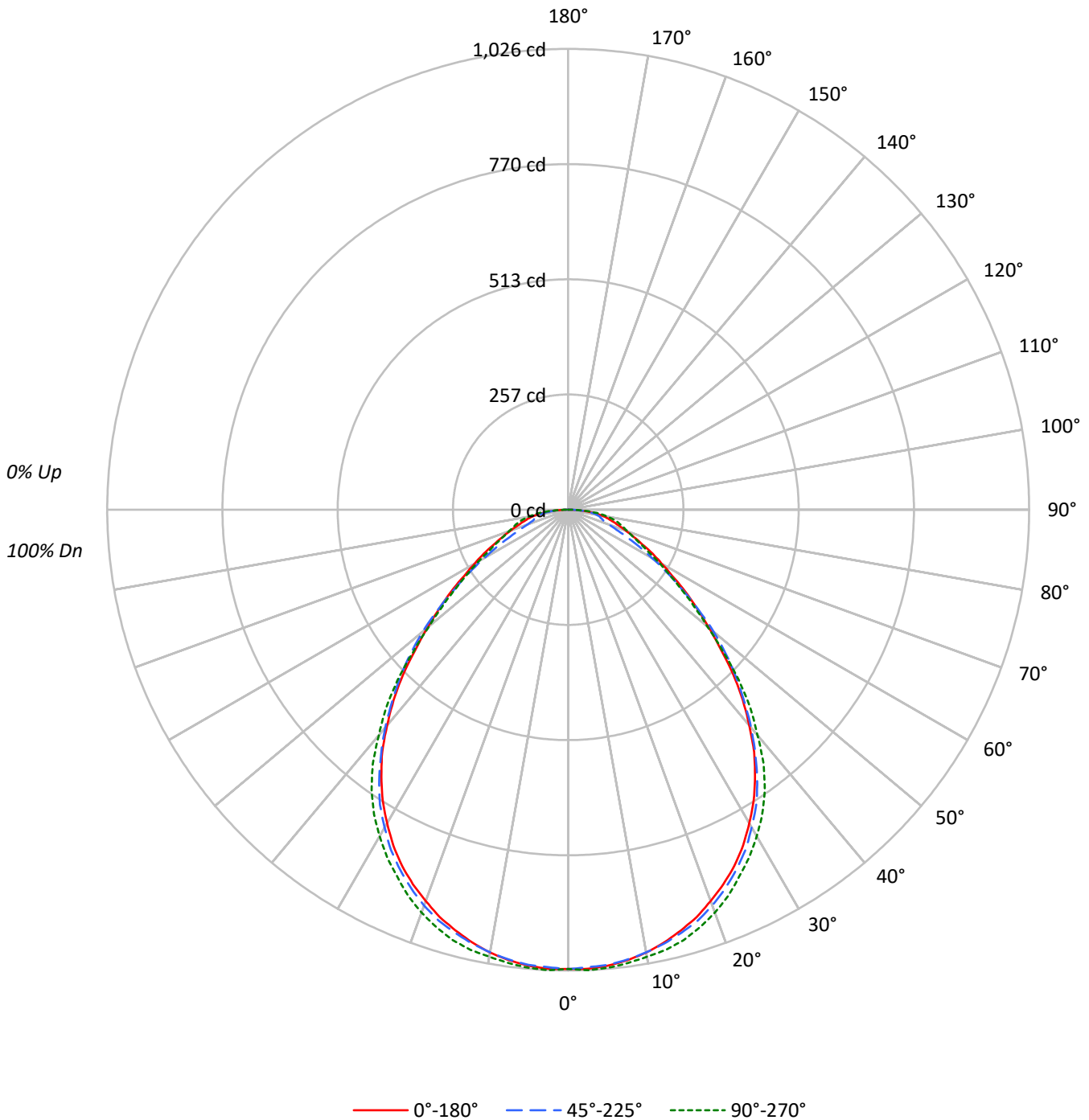
Input Watts (W): 18.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88					86				
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76					74				
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66					64				
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58					56				
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51					49				
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46					44				
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41					39				
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37					36				
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34					32				
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31					30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2752	2752	2752
5°	2753	2748	2765
10°	2736	2735	2762
15°	2701	2716	2764
20°	2655	2686	2734
25°	2598	2627	2675
30°	2504	2538	2608
35°	2381	2409	2506
40°	2201	2225	2304
45°	1977	2013	2045
50°	1710	1771	1693
55°	1492	1453	1433
60°	1292	1164	1242
65°	1155	913	1115
70°	1071	756	1100
75°	1070	800	1221
80°	1184	1007	1378
85°	1235	1090	1556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	4.3
10°-20°	275.6	12.3
20°-30°	407.6	18.3
30°-40°	460.0	20.6
40°-50°	405.5	18.2
50°-60°	278.2	12.5
60°-70°	164.2	7.4
70°-80°	102.4	4.6
80°-90°	42.7	1.9
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°	780.0	34.9
0°-40°	1240.0	55.5
0°-60°	1923.7	86.1
0°-90°	2233.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2233.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1023	1023	1023	1023	1023	
5°	1019	1017	1017	1021	1024	97
15°	970	971	975	987	992	273
25°	875	878	885	896	901	402
35°	725	731	733	751	763	452
45°	520	522	529	532	537	399
55°	318	310	310	299	306	285
65°	181	160	143	166	175	183
75°	103	92	77	108	117	110
85°	40	37	35	46	50	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1022.6	1022.6	1022.6	1022.6	1022.6
2.5°	1023.2	1020.6	1019.5	1023.7	1026.3
5°	1019.0	1016.9	1017.4	1021.1	1023.7
7.5°	1011.7	1010.2	1010.2	1015.4	1018.0
10°	1001.3	1000.8	1000.8	1007.0	1010.7
12.5°	986.8	987.3	989.4	997.7	1003.9
15°	969.6	970.7	974.8	986.8	992.0
17.5°	950.9	950.9	959.2	968.6	974.8
20°	927.0	928.6	937.9	948.3	954.6
22.5°	902.6	905.2	913.0	924.9	930.7
25°	875.1	878.2	884.9	896.4	901.0
27.5°	842.8	847.0	854.3	862.6	872.5
30°	805.9	812.2	816.9	828.3	839.2
32.5°	768.5	774.2	779.4	791.4	803.9
35°	724.9	731.1	733.2	750.9	762.8
37.5°	680.2	682.8	683.8	701.5	714.5
40°	626.7	631.9	633.4	647.5	655.8
42.5°	575.2	577.3	580.4	590.8	600.7
45°	519.6	522.2	529.0	532.1	537.3
47.5°	461.4	469.2	477.0	467.1	467.7
50°	408.4	414.7	423.0	404.3	404.3
52.5°	361.1	364.3	364.8	349.2	352.3
55°	318.0	310.2	309.7	299.3	305.5
57.5°	274.9	264.5	260.9	257.7	265.0
60°	240.1	221.4	216.2	220.8	230.7
62.5°	211.5	187.6	177.7	189.7	198.5
65°	181.4	159.5	143.4	165.8	175.1
67.5°	158.0	137.2	116.4	148.1	154.8
70°	136.1	120.0	96.1	134.6	139.8
72.5°	118.5	106.0	83.1	121.6	127.8
75°	102.9	92.5	76.9	107.6	117.4
77.5°	90.4	79.0	71.7	93.0	105.0
80°	76.4	65.0	65.0	77.9	88.9
82.5°	60.3	50.9	52.5	63.4	71.2
85°	40.0	37.4	35.3	46.2	50.4
87.5°	20.3	20.8	18.7	23.9	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)