

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: P291878

Luminaire Tested: **22GR-LD5-24-F1-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291878
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-F1-UNV-L92765-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2155.0 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

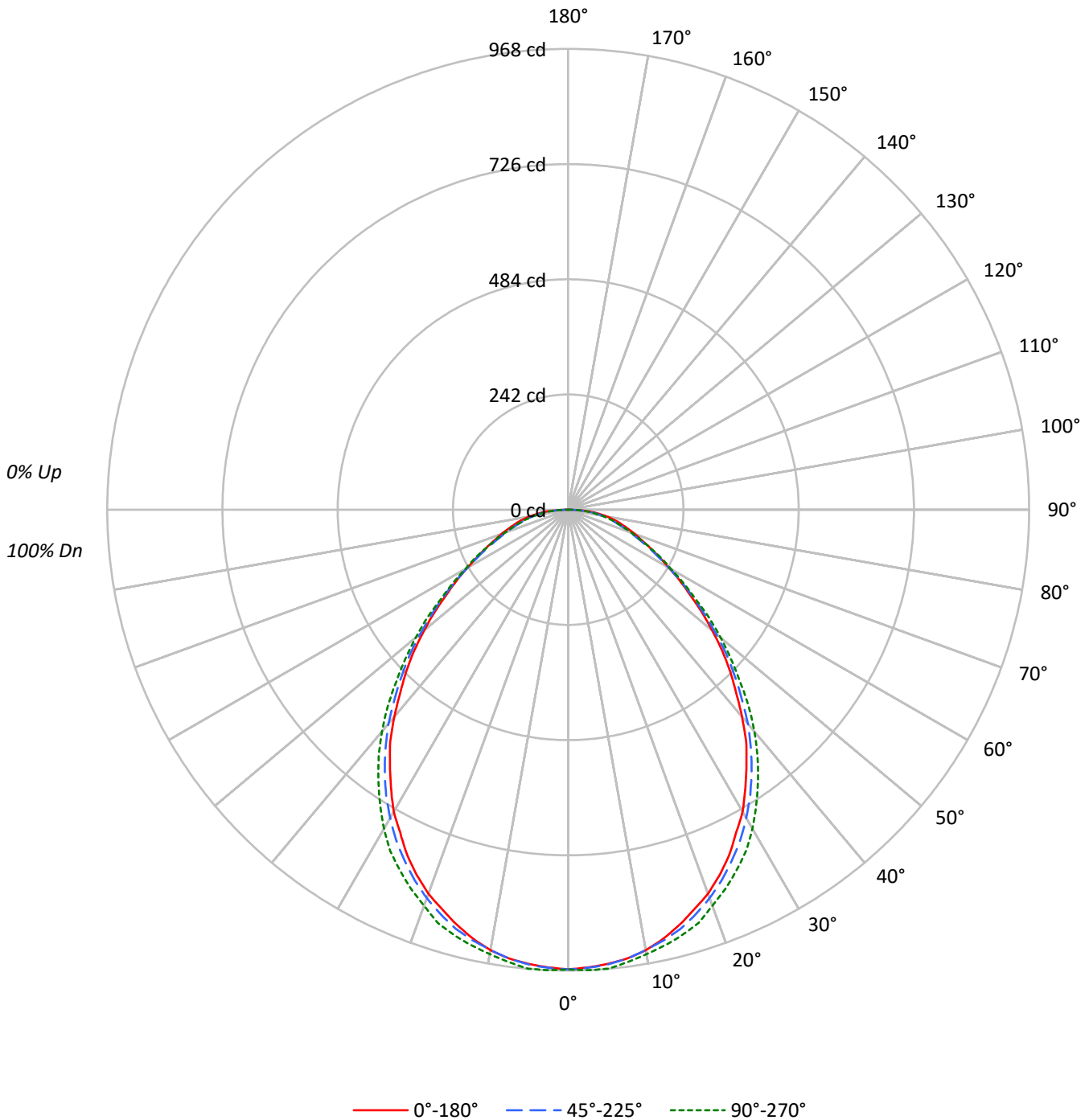
Input Watts (W): 18.321
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2599	2599	2599
5°	2587	2590	2614
10°	2567	2566	2590
15°	2515	2540	2577
20°	2458	2486	2534
25°	2377	2415	2482
30°	2276	2322	2404
35°	2143	2205	2283
40°	1994	2062	2137
45°	1831	1884	1942
50°	1652	1693	1747
55°	1465	1500	1526
60°	1313	1316	1343
65°	1210	1169	1210
70°	1168	1083	1114
75°	1188	1061	1080
80°	1282	1113	1113
85°	1420	1176	1161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	4.2
10°-20°	256.9	11.9
20°-30°	375.0	17.4
30°-40°	419.8	19.5
40°-50°	382.1	17.7
50°-60°	287.6	13.3
60°-70°	187.7	8.7
70°-80°	112.6	5.2
80°-90°	42.2	2.0
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°	723.0	33.6
0°-40°	1142.9	53.0
0°-60°	1812.6	84.1
0°-90°	2155.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2155.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	958	956	959	962	968	91
15°	903	904	912	919	925	254
25°	800	803	813	828	836	367
35°	652	658	671	687	695	408
45°	481	486	495	505	510	370
55°	312	317	320	324	325	282
65°	190	188	184	187	190	190
75°	114	110	102	102	104	121
85°	46	44	38	36	38	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	965.7	965.7	965.7	965.7	965.7
2.5°	962.2	961.7	963.2	965.7	968.2
5°	957.8	956.3	958.8	962.2	967.7
7.5°	950.9	950.9	950.9	957.3	958.3
10°	939.5	940.5	939.0	945.4	947.9
12.5°	923.1	923.6	926.6	933.0	937.5
15°	902.8	903.8	911.7	919.2	925.1
17.5°	880.1	883.5	891.0	902.8	910.3
20°	858.3	862.3	868.2	881.1	885.0
22.5°	830.6	835.0	842.5	853.8	862.3
25°	800.4	802.9	813.2	828.1	836.0
27.5°	764.2	769.7	782.6	797.9	808.8
30°	732.6	735.5	747.4	765.2	773.7
32.5°	692.5	701.4	711.3	727.1	735.0
35°	652.4	658.3	671.2	687.0	694.9
37.5°	613.8	617.2	630.1	643.5	653.4
40°	567.7	574.2	587.0	601.4	608.3
42.5°	521.7	531.1	539.5	553.9	561.3
45°	481.1	486.1	495.0	505.4	510.3
47.5°	438.6	441.0	451.4	457.9	463.3
50°	394.5	397.5	404.4	410.8	417.3
52.5°	353.9	356.4	360.8	366.8	373.2
55°	312.3	316.8	319.8	324.2	325.2
57.5°	278.7	278.2	280.2	283.6	287.1
60°	244.0	245.0	244.5	248.0	249.5
62.5°	215.3	214.8	211.9	216.8	220.8
65°	190.1	188.1	183.6	186.6	190.1
67.5°	166.8	165.8	158.4	160.9	163.8
70°	148.5	145.0	137.6	139.1	141.6
72.5°	130.7	126.7	119.3	119.8	121.3
75°	114.3	110.4	102.0	102.5	103.9
77.5°	99.0	94.0	86.6	85.6	86.6
80°	82.7	78.2	71.8	68.8	71.8
82.5°	65.8	63.4	55.9	53.0	54.0
85°	46.0	44.5	38.1	36.1	37.6
87.5°	21.3	22.8	19.3	17.8	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)