

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: P291740

Luminaire Tested: **22GR-LD5-24-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291740
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-L83050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2562.0 lumens
Efficiency: N/A
Efficacy: 138.4 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

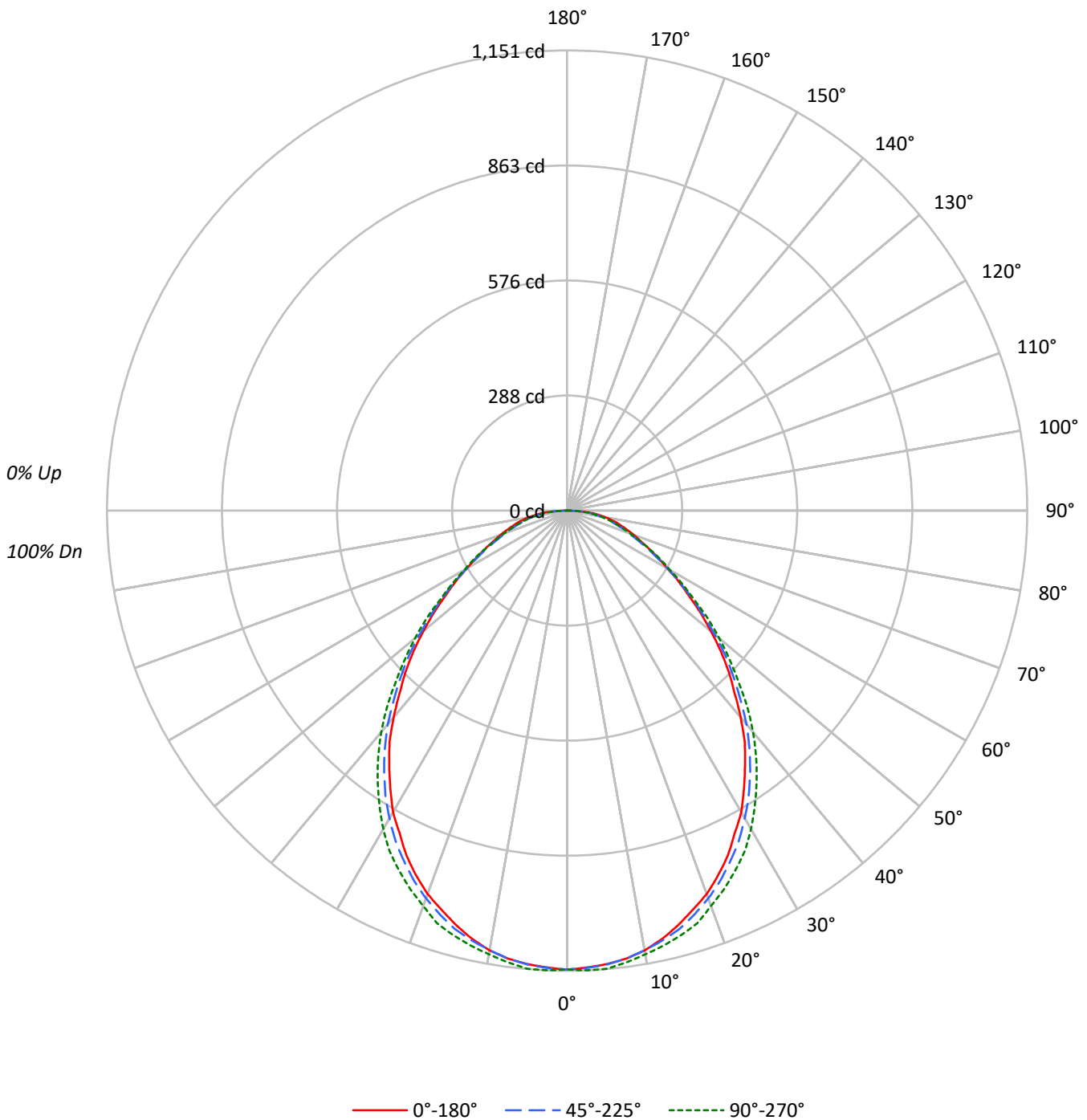
Input Watts (W): 18.507
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3090	3090	3090
5°	3076	3079	3108
10°	3052	3050	3079
15°	2990	3020	3064
20°	2922	2956	3013
25°	2825	2871	2951
30°	2706	2761	2858
35°	2548	2621	2714
40°	2371	2452	2540
45°	2177	2240	2309
50°	1963	2013	2077
55°	1742	1783	1814
60°	1561	1565	1596
65°	1439	1390	1439
70°	1389	1287	1324
75°	1413	1260	1285
80°	1523	1322	1322
85°	1689	1399	1380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.3	4.2
10°-20°	305.5	11.9
20°-30°	445.8	17.4
30°-40°	499.1	19.5
40°-50°	454.3	17.7
50°-60°	341.9	13.3
60°-70°	223.1	8.7
70°-80°	133.8	5.2
80°-90°	50.2	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°	859.6	33.6
0°-40°	1358.7	53.0
0°-60°	2154.9	84.1
0°-90°	2562.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2562.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1148	1148	1148	1148	1148	
5°	1139	1137	1140	1144	1150	108
15°	1073	1074	1084	1093	1100	302
25°	952	954	967	984	994	437
35°	776	783	798	817	826	485
45°	572	578	588	601	607	440
55°	371	377	380	385	387	336
65°	226	224	218	222	226	226
75°	136	131	121	122	124	144
85°	55	53	45	43	45	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.1	1148.1	1148.1	1148.1	<i>1148.1</i>
2.5°	<i>1144.0</i>	<i>1143.4</i>	<i>1145.1</i>	<i>1148.1</i>	<i>1151.0</i>
5°	1138.7	1136.9	1139.8	1144.0	<i>1150.4</i>
7.5°	1130.4	1130.4	1130.4	1138.1	<i>1139.3</i>
10°	1116.9	1118.1	1116.3	1124.0	<i>1126.9</i>
12.5°	1097.5	1098.1	1101.6	1109.2	<i>1114.5</i>
15°	1073.4	1074.5	1083.9	1092.8	<i>1099.8</i>
17.5°	1046.3	1050.4	1059.2	1073.4	<i>1082.2</i>
20°	1020.4	1025.1	1032.2	1047.5	<i>1052.2</i>
22.5°	987.4	992.7	1001.6	1015.1	<i>1025.1</i>
25°	951.5	954.5	966.8	984.5	<i>993.9</i>
27.5°	908.6	915.1	930.4	948.6	<i>961.5</i>
30°	870.9	874.5	888.6	909.8	<i>919.8</i>
32.5°	823.3	833.8	845.6	864.4	<i>873.9</i>
35°	775.6	782.7	798.0	816.8	<i>826.2</i>
37.5°	729.7	733.8	749.1	765.0	<i>776.8</i>
40°	675.0	682.6	697.9	715.0	<i>723.2</i>
42.5°	620.2	631.4	641.4	658.5	<i>667.3</i>
45°	572.0	577.9	588.5	600.8	<i>606.7</i>
47.5°	521.4	524.3	536.7	544.3	<i>550.8</i>
50°	469.0	472.5	480.8	488.4	<i>496.1</i>
52.5°	420.7	423.7	429.0	436.0	<i>443.7</i>
55°	371.3	376.6	380.1	385.4	<i>386.6</i>
57.5°	331.3	330.7	333.1	337.2	<i>341.3</i>
60°	290.1	291.3	290.7	294.8	<i>296.6</i>
62.5°	256.0	255.4	251.9	257.7	<i>262.5</i>
65°	226.0	223.6	218.3	221.8	<i>226.0</i>
67.5°	198.3	197.1	188.3	191.2	<i>194.8</i>
70°	176.5	172.4	163.6	165.4	<i>168.3</i>
72.5°	155.4	150.6	141.8	142.4	<i>144.2</i>
75°	135.9	131.2	121.2	121.8	<i>123.6</i>
77.5°	117.7	111.8	103.0	101.8	<i>103.0</i>
80°	98.3	93.0	85.3	81.8	<i>85.3</i>
82.5°	78.3	75.3	66.5	63.0	<i>64.1</i>
85°	54.7	53.0	45.3	43.0	<i>44.7</i>
87.5°	25.3	27.1	22.9	21.2	<i>21.8</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)