

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: P231792

Luminaire Tested: **24GR-LD5-180-F1-UNV-L930-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231792
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-180-F1-UNV-L930-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH F1 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14238.5 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

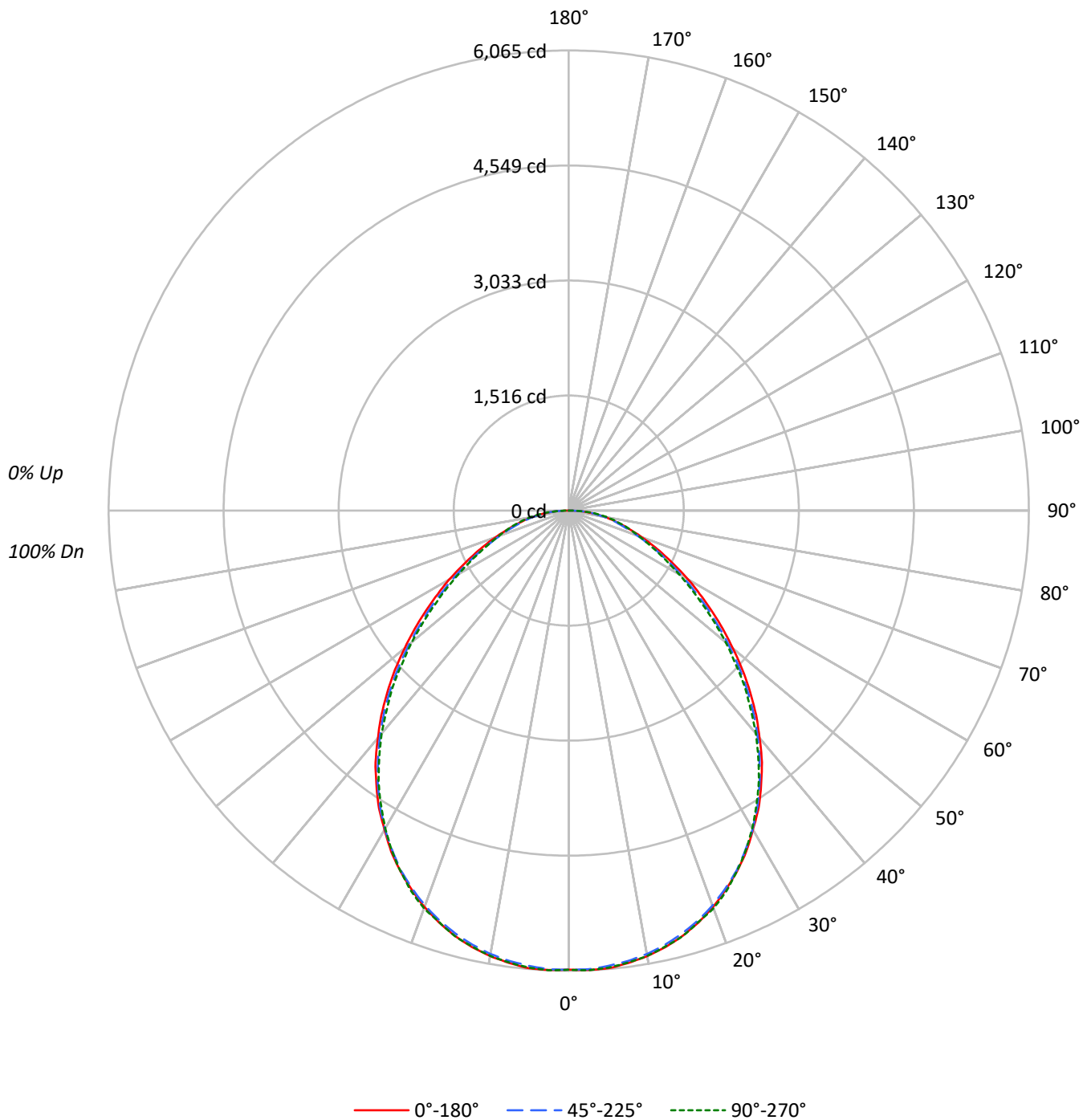
Input Watts (W): 144.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	109	105	101	97	107	103	99	96		98	95	93			95	92	90			91
2	100	92	86	81	98	91	85	80		87	82	78			84	80	76			81
3	92	82	74	68	90	80	73	68		78	71	66			75	70	65			72
4	85	73	65	59	82	72	64	58		70	63	57			67	61	57			65
5	78	66	57	51	76	65	57	51		63	56	50			61	55	50			59
6	72	60	51	45	71	59	51	45		57	50	44			55	49	44			54
7	67	54	46	40	66	54	46	40		52	45	40			51	44	39			49
8	63	50	42	36	61	49	41	36		48	41	36			47	40	36			46
9	59	46	38	33	58	45	38	33		44	37	32			43	37	32			42
10	55	43	35	30	54	42	35	30		41	34	30			40	34	29			39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9268	9268	9268
5°	9311	9259	9297
10°	9273	9228	9269
15°	9200	9151	9207
20°	9065	9029	9094
25°	8869	8846	8865
30°	8589	8573	8553
35°	8264	8202	8169
40°	7823	7734	7671
45°	7318	7183	7096
50°	6724	6544	6433
55°	6133	5907	5735
60°	5570	5270	5133
65°	5017	4735	4654
70°	4595	4295	4415
75°	4293	4096	4399
80°	4260	4181	4594
85°	4342	4381	5007



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	572.7	4.0
10°-20°	1628.2	11.4
20°-30°	2405.4	16.9
30°-40°	2734.7	19.2
40°-50°	2553.8	17.9
50°-60°	1986.0	13.9
60°-70°	1317.8	9.3
70°-80°	762.6	5.4
80°-90°	277.3	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°	4606.3	32.4
0°-40°	7341.0	51.6
0°-60°	11880.8	83.4
0°-90°	14238.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14238.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6051	6051	6051	6051	6051	
5°	6056	6025	6022	6034	6047	575
15°	5802	5773	5771	5769	5806	1635
25°	5248	5226	5235	5223	5246	2413
35°	4420	4398	4387	4355	4369	2759
45°	3378	3352	3316	3274	3276	2603
55°	2297	2263	2212	2154	2148	2060
65°	1384	1342	1306	1282	1284	1383
75°	726	708	692	723	743	776
85°	247	243	249	283	285	269
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6051.4	6051.4	6051.4	6051.4	6051.4
2.5°	6060.3	6042.4	6051.4	6044.7	6064.7
5°	6055.8	6024.6	6022.4	6033.6	6046.9
7.5°	6013.6	5980.1	5986.8	5986.8	6009.0
10°	5962.3	5928.9	5933.4	5935.7	5960.1
12.5°	5893.3	5860.0	5862.2	5860.0	5884.4
15°	5802.1	5773.1	5770.9	5768.7	5806.5
17.5°	5690.8	5650.8	5664.1	5666.4	5686.4
20°	5561.7	5530.6	5539.4	5537.2	5579.5
22.5°	5408.1	5385.9	5392.6	5388.1	5428.2
25°	5247.9	5225.7	5234.6	5223.4	5245.7
27.5°	5067.7	5052.1	5043.2	5036.5	5052.1
30°	4856.2	4847.3	4847.3	4818.4	4836.2
32.5°	4655.9	4627.0	4627.0	4615.9	4604.7
35°	4420.0	4397.7	4386.6	4355.4	4368.8
37.5°	4184.0	4132.9	4128.5	4103.9	4103.9
40°	3912.5	3883.6	3868.0	3841.4	3836.9
42.5°	3654.4	3625.5	3598.7	3554.3	3545.4
45°	3378.4	3351.8	3316.1	3273.8	3276.1
47.5°	3104.7	3066.9	3033.4	2982.3	2975.6
50°	2822.0	2795.3	2746.3	2701.8	2699.6
52.5°	2557.2	2514.9	2470.4	2417.0	2417.0
55°	2296.8	2263.4	2212.2	2154.4	2147.7
57.5°	2047.5	2016.4	1958.5	1916.3	1905.1
60°	1818.3	1773.8	1720.4	1684.8	1675.8
62.5°	1589.1	1549.0	1509.0	1473.3	1471.1
65°	1384.3	1342.0	1306.4	1281.9	1284.1
67.5°	1199.6	1164.0	1123.9	1117.2	1119.5
70°	1026.0	988.2	959.2	974.8	986.0
72.5°	861.3	841.2	821.2	843.5	859.1
75°	725.5	707.7	692.2	723.3	743.3
77.5°	600.9	587.5	585.3	612.0	629.8
80°	483.0	467.4	474.0	505.2	520.8
82.5°	367.2	356.1	358.3	396.1	407.3
85°	247.1	242.6	249.3	282.7	284.9
87.5°	131.3	131.3	135.8	155.8	149.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)