

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: P293035

Luminaire Tested: **24GR-LD5-30-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293035
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-30-F1-UNV-L93050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2371.0 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

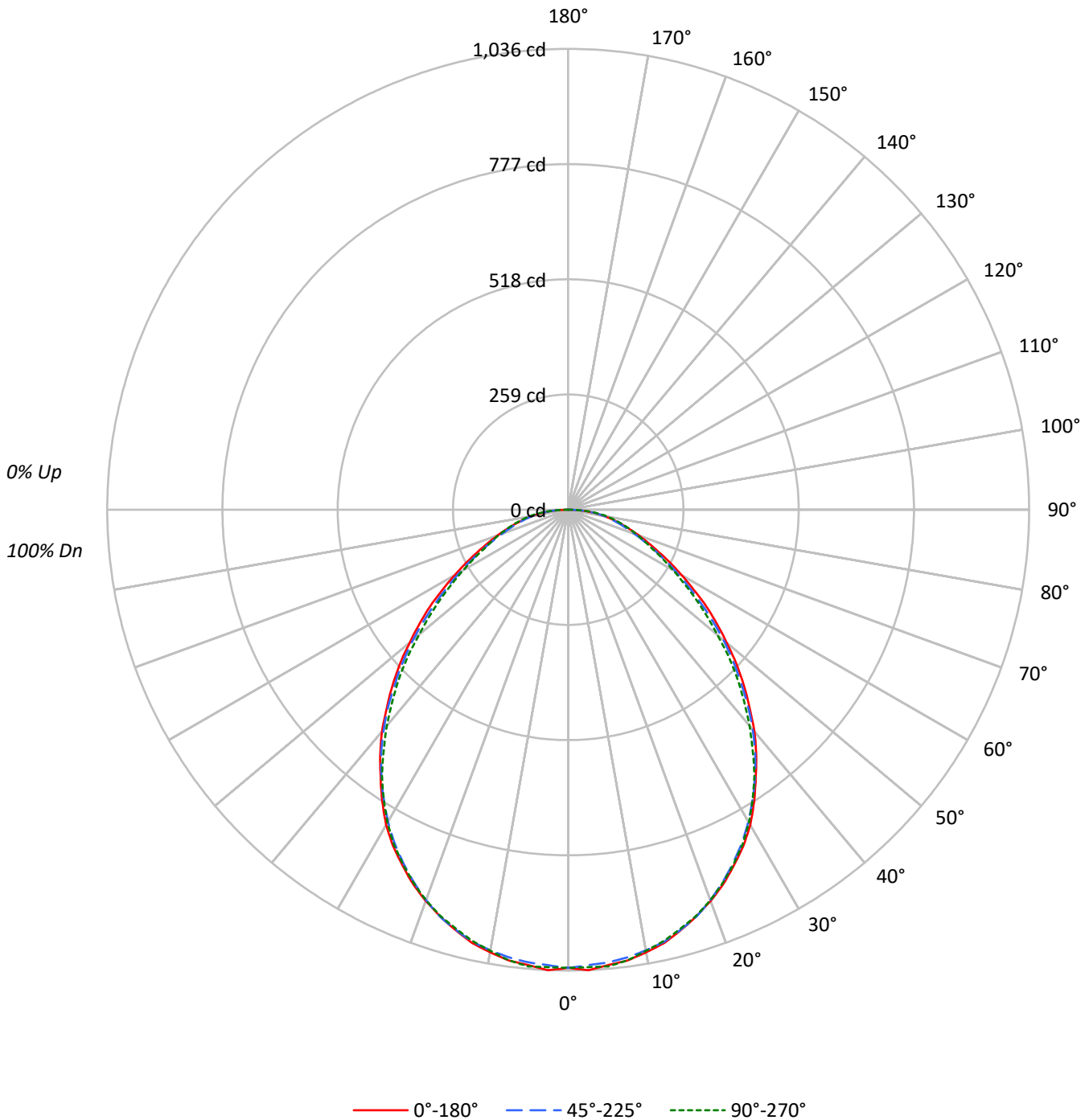
Input Watts (W): 20.454885
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1386	1386	1386
5°	1388	1380	1392
10°	1380	1374	1376
15°	1363	1362	1358
20°	1340	1337	1337
25°	1309	1302	1305
30°	1271	1258	1262
35°	1207	1202	1198
40°	1143	1133	1113
45°	1063	1044	1024
50°	974	952	916
55°	889	849	820
60°	792	754	734
65°	713	676	666
70°	662	622	646
75°	633	605	656
80°	633	633	701
85°	656	664	739



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.3	4.1
10°-20°	275.2	11.6
20°-30°	404.0	17.0
30°-40°	456.7	19.3
40°-50°	422.1	17.8
50°-60°	325.2	13.7
60°-70°	215.3	9.1
70°-80°	128.2	5.4
80°-90°	47.0	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°	776.5	32.7
0°-40°	1233.2	52.0
0°-60°	1980.5	83.5
0°-90°	2371.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2371.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1030	1030	1030	1030	1030	
5°	1028	1028	1022	1022	1030	98
15°	979	977	978	977	975	276
25°	882	879	877	876	879	406
35°	735	734	732	728	730	460
45°	558	555	549	539	538	430
55°	379	371	362	352	350	338
65°	224	221	212	210	209	225
75°	122	119	116	122	126	130
85°	42	40	43	47	48	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1029.9	1029.9	1029.9	1029.9	1029.9
2.5°	1036.3	1030.9	1025.0	1025.0	1029.4
5°	1027.5	1027.5	1021.6	1022.1	1030.4
7.5°	1022.1	1019.1	1015.2	1015.2	1021.6
10°	1010.3	1007.9	1005.9	1005.0	1006.9
12.5°	997.6	993.7	995.2	993.7	993.2
15°	978.6	976.6	977.6	977.1	975.1
17.5°	958.0	957.0	959.0	955.6	957.0
20°	936.0	933.1	934.1	932.1	934.1
22.5°	911.1	909.1	906.7	904.2	908.1
25°	881.7	879.3	876.8	875.9	878.8
27.5°	852.4	848.5	845.1	844.1	848.5
30°	818.2	813.8	809.8	808.9	812.3
32.5°	777.6	776.6	771.7	769.7	771.2
35°	735.0	734.0	731.6	728.2	729.6
37.5°	694.4	693.9	690.5	684.6	680.7
40°	650.9	647.5	645.0	636.7	633.8
42.5°	603.0	602.0	597.6	588.3	584.9
45°	558.5	554.6	548.7	538.9	537.9
47.5°	512.5	507.1	501.7	489.5	489.0
50°	465.1	461.2	454.8	442.6	437.7
52.5°	421.1	415.7	406.9	395.1	392.7
55°	379.0	371.2	361.9	352.1	349.7
57.5°	334.0	330.6	319.3	311.5	308.6
60°	294.4	291.5	280.2	272.9	272.9
62.5°	258.7	254.3	244.5	239.6	239.6
65°	224.0	220.6	212.2	210.3	209.3
67.5°	194.1	189.7	183.9	183.4	185.8
70°	168.2	162.8	158.0	162.8	164.3
72.5°	143.8	140.4	136.0	142.3	145.2
75°	121.8	118.8	116.4	121.8	126.2
77.5°	101.7	98.8	98.8	104.7	108.6
80°	81.7	79.7	81.7	86.6	90.5
82.5°	62.6	61.1	63.6	68.5	70.9
85°	42.5	40.1	43.0	47.4	47.9
87.5°	20.1	19.6	21.5	24.5	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)