

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: P293040

Luminaire Tested: **24GR-LD5-34-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293040
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-LD5-34-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: 2716.0 lumens
Efficiency: N/A
Efficacy: 115.6 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

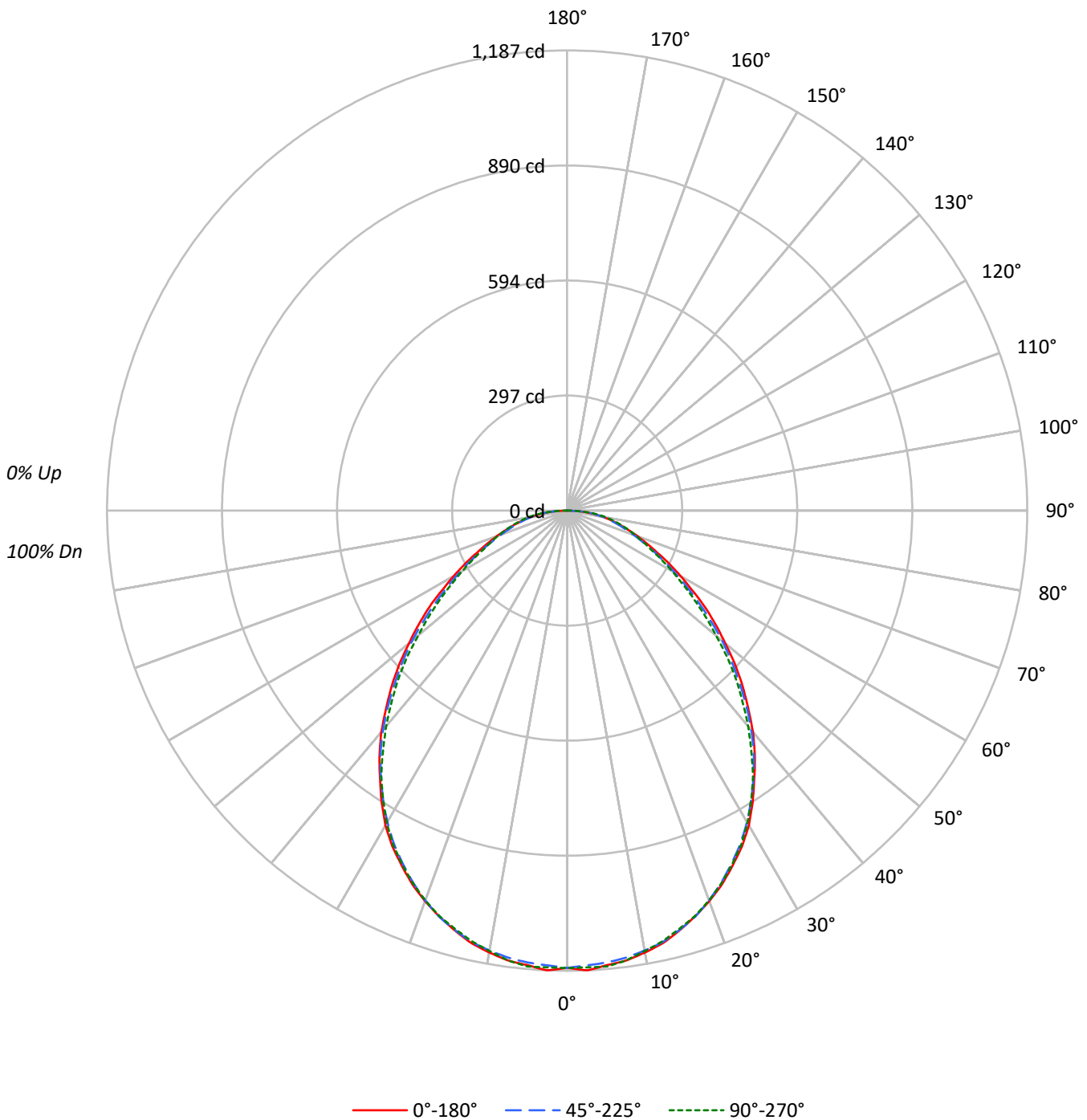
Input Watts (W): 23.499333
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1587	1587	1587
5°	1590	1581	1594
10°	1581	1574	1576
15°	1561	1560	1556
20°	1535	1532	1532
25°	1499	1491	1495
30°	1456	1441	1446
35°	1383	1376	1373
40°	1310	1298	1275
45°	1217	1196	1173
50°	1115	1091	1050
55°	1018	972	939
60°	907	864	841
65°	817	774	763
70°	758	712	740
75°	725	693	751
80°	725	725	803
85°	752	761	848



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.4	4.1
10°-20°	315.3	11.6
20°-30°	462.7	17.0
30°-40°	523.2	19.3
40°-50°	483.5	17.8
50°-60°	372.5	13.7
60°-70°	246.7	9.1
70°-80°	146.8	5.4
80°-90°	53.8	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°	889.5	32.7
0°-40°	1412.6	52.0
0°-60°	2268.7	83.5
0°-90°	2716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2716.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1177	1177	1170	1171	1180	112
15°	1121	1119	1120	1119	1117	316
25°	1010	1007	1004	1003	1007	465
35°	842	841	838	834	836	527
45°	640	635	628	617	616	493
55°	434	425	414	403	400	387
65°	257	253	243	241	240	257
75°	140	136	133	140	144	149
85°	49	46	49	54	55	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1179.8	1179.8	1179.8	1179.8	1179.8
2.5°	1187.0	1180.9	1174.2	1174.2	1179.2
5°	1177.0	1177.0	1170.2	1170.8	1180.3
7.5°	1170.8	1167.4	1163.0	1163.0	1170.2
10°	1157.4	1154.6	1152.3	1151.2	1153.4
12.5°	1142.8	1138.3	1140.0	1138.3	1137.8
15°	1120.9	1118.7	1119.8	1119.3	1117.0
17.5°	1097.4	1096.3	1098.5	1094.6	1096.3
20°	1072.2	1068.8	1070.0	1067.7	1070.0
22.5°	1043.6	1041.4	1038.6	1035.8	1040.3
25°	1010.0	1007.2	1004.4	1003.3	1006.7
27.5°	976.4	971.9	968.0	966.9	971.9
30°	937.2	932.2	927.7	926.6	930.5
32.5°	890.7	889.6	884.0	881.7	883.4
35°	842.0	840.8	838.0	834.1	835.8
37.5°	795.5	794.9	791.0	784.3	779.8
40°	745.6	741.7	738.9	729.4	726.0
42.5°	690.7	689.6	684.6	673.9	670.0
45°	639.7	635.3	628.5	617.3	616.2
47.5°	587.1	580.9	574.8	560.8	560.2
50°	532.7	528.3	521.0	507.0	501.4
52.5°	482.3	476.2	466.1	452.6	449.8
55°	434.1	425.2	414.5	403.3	400.5
57.5°	382.6	378.7	365.8	356.8	353.5
60°	337.2	333.9	321.0	312.6	312.6
62.5°	296.3	291.3	280.1	274.5	274.5
65°	256.6	252.6	243.1	240.9	239.8
67.5°	222.4	217.4	210.6	210.1	212.9
70°	192.7	186.5	180.9	186.5	188.2
72.5°	164.7	160.8	155.7	163.0	166.4
75°	139.5	136.1	133.3	139.5	144.5
77.5°	116.5	113.2	113.2	119.9	124.4
80°	93.6	91.3	93.6	99.2	103.6
82.5°	71.7	70.0	72.8	78.4	81.2
85°	48.7	45.9	49.3	54.3	54.9
87.5°	23.0	22.4	24.6	28.0	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)