

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: P293544

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293544
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-34-A-UNV-L93050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2748.0 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

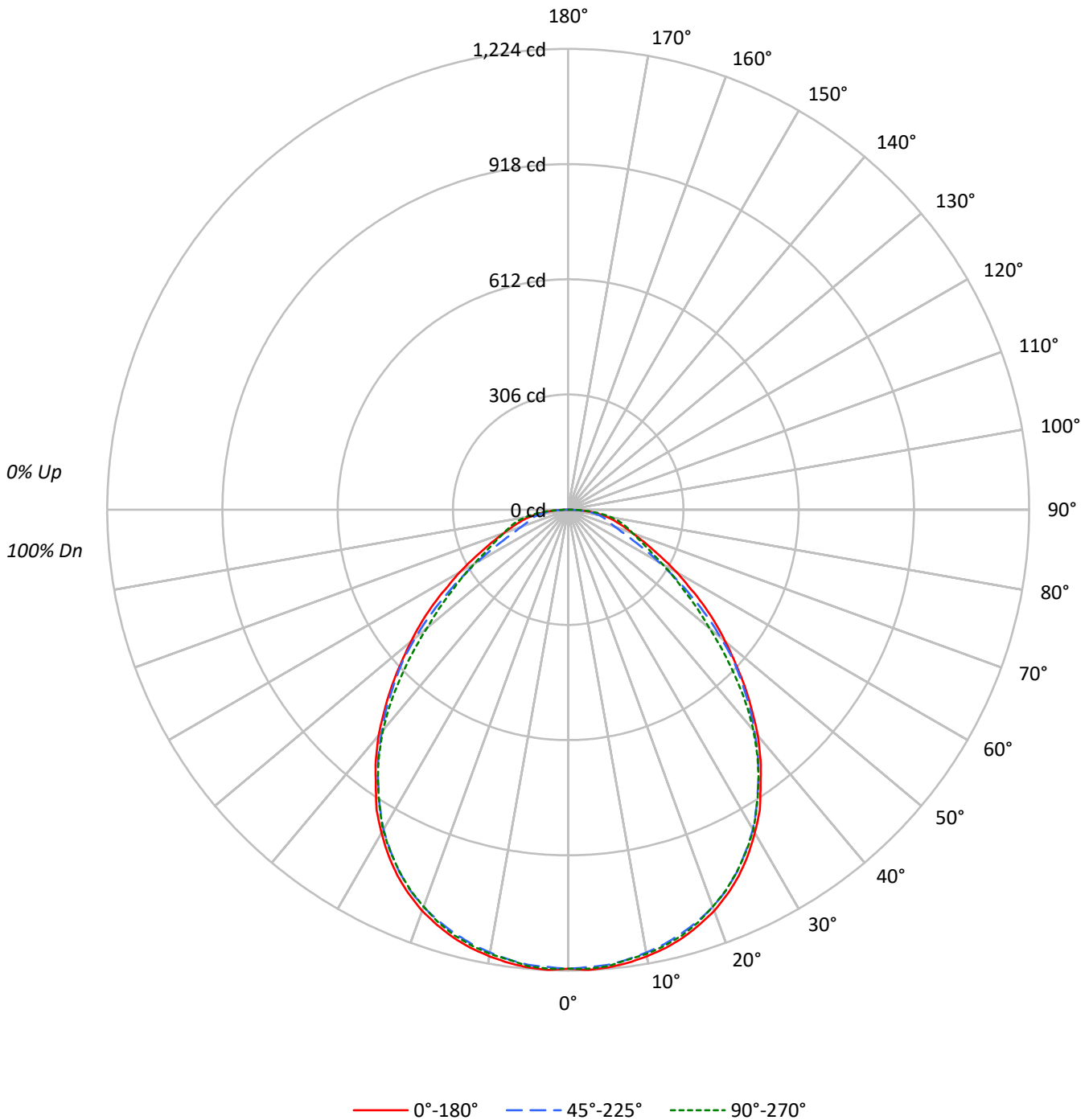
Input Watts (W): 23.499333
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88					86				
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75					73				
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65					63				
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57					55				
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51					49				
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45					43				
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41					39				
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37					35				
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33					32				
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30					29				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1641	1641	1641
5°	1648	1639	1643
10°	1646	1632	1637
15°	1639	1623	1630
20°	1624	1607	1607
25°	1592	1575	1574
30°	1539	1524	1527
35°	1462	1446	1448
40°	1375	1351	1343
45°	1260	1243	1194
50°	1139	1108	1025
55°	1023	931	883
60°	896	749	777
65°	781	589	715
70°	715	515	715
75°	715	547	788
80°	776	645	898
85°	852	727	963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.5	4.2
10°-20°	329.5	12.0
20°-30°	488.6	17.8
30°-40°	551.2	20.1
40°-50°	499.2	18.2
50°-60°	360.1	13.1
60°-70°	215.0	7.8
70°-80°	132.9	4.8
80°-90°	56.0	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°	933.5	34.0
0°-40°	1484.7	54.0
0°-60°	2344.1	85.3
0°-90°	2748.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2748.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1219	1219	1219	1219	1219	
5°	1220	1219	1214	1212	1217	116
15°	1177	1170	1165	1165	1170	332
25°	1072	1066	1061	1057	1060	493
35°	890	889	880	880	881	557
45°	662	658	653	637	628	510
55°	436	422	397	377	377	389
65°	245	216	185	210	225	247
75°	138	119	105	131	152	147
85°	55	48	47	62	62	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1219.3	1219.3	1219.3	1219.3	1219.3
2.5°	1223.5	1220.1	1215.9	1218.4	1220.5
5°	1220.5	1218.8	1213.7	1212.5	1216.7
7.5°	1214.2	1209.9	1205.2	1207.4	1205.7
10°	1204.4	1200.6	1194.6	1195.1	1198.0
12.5°	1192.5	1187.8	1181.5	1183.2	1185.7
15°	1176.8	1169.6	1164.9	1165.3	1170.0
17.5°	1156.8	1151.3	1145.4	1146.7	1148.8
20°	1133.9	1131.0	1122.5	1119.9	1122.0
22.5°	1105.1	1099.5	1094.9	1093.6	1094.0
25°	1072.4	1066.4	1060.9	1057.1	1060.1
27.5°	1034.2	1029.1	1021.8	1020.6	1023.1
30°	990.9	987.0	980.7	979.0	982.8
32.5°	946.7	940.3	931.4	931.4	932.3
35°	890.2	889.0	880.1	880.5	881.3
37.5°	839.3	833.4	828.3	823.2	825.7
40°	782.8	776.0	769.3	765.9	764.6
42.5°	722.1	717.0	714.1	701.8	698.8
45°	662.3	658.0	653.4	637.2	627.5
47.5°	601.1	600.3	596.5	568.0	558.3
50°	544.2	543.0	529.4	499.2	489.5
52.5°	490.3	481.8	464.0	434.3	432.6
55°	436.0	422.4	396.9	377.4	376.6
57.5°	378.7	362.6	336.7	326.0	331.6
60°	332.8	308.2	278.5	279.8	288.7
62.5°	285.3	257.7	228.4	241.1	251.7
65°	245.4	216.1	185.1	210.1	224.6
67.5°	210.6	183.4	153.7	187.2	201.2
70°	181.7	159.6	130.8	166.0	181.7
72.5°	158.8	138.4	115.9	149.0	167.3
75°	137.5	119.3	105.3	131.2	151.6
77.5°	119.3	101.5	95.1	115.9	135.9
80°	100.2	84.1	83.2	101.0	115.9
82.5°	78.1	67.1	67.1	84.5	93.4
85°	55.2	48.4	47.1	61.6	62.4
87.5°	28.4	27.2	24.6	32.3	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)