

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: P293413

Luminaire Tested: **24GR-LD5-30-A-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293413
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-LD5-30-A-UNV-L83050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2914.0 lumens
Efficiency: N/A
Efficacy: 145.7 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

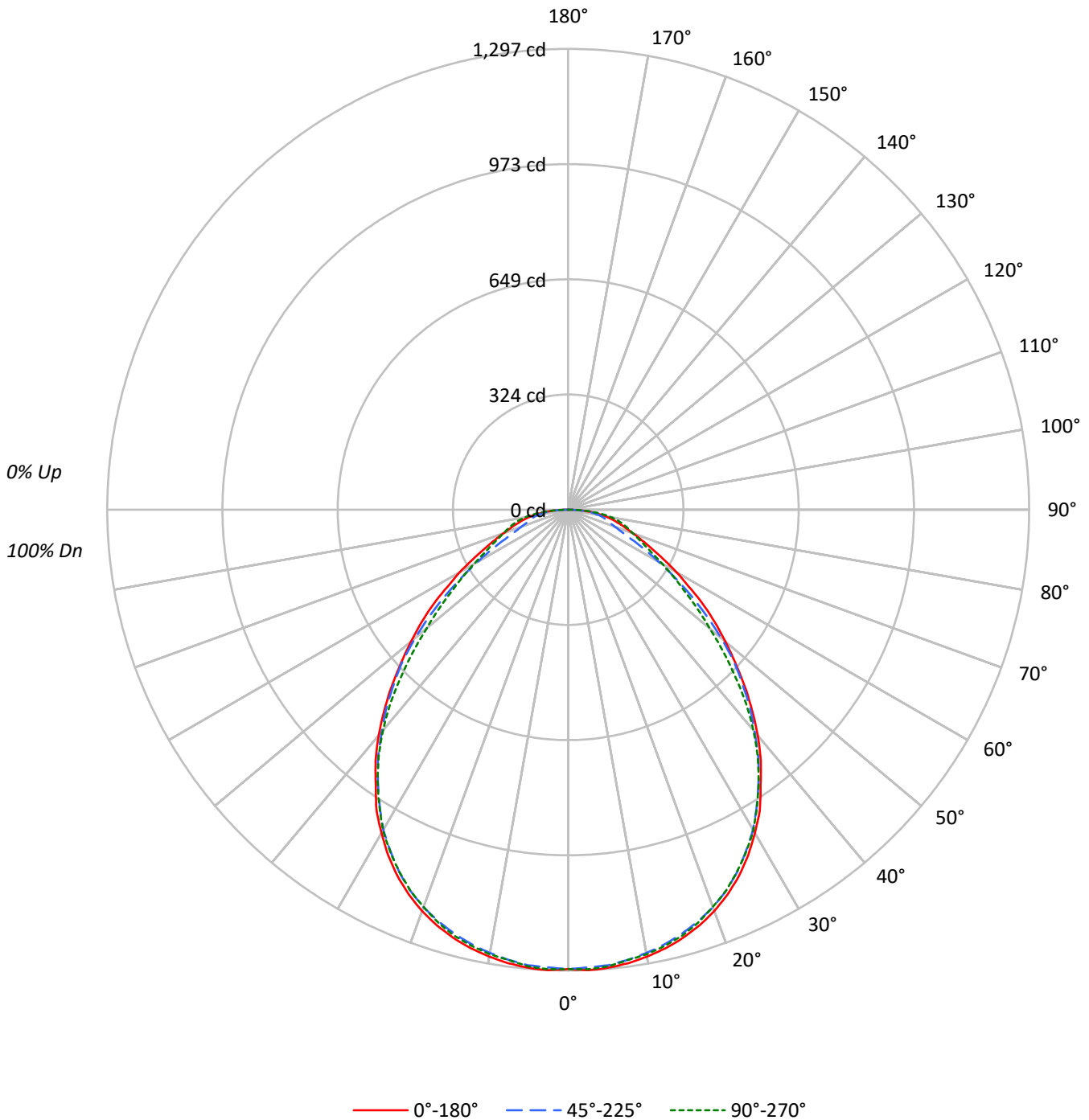
Input Watts (W): 19.995
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1740	1740	1740
5°	1748	1738	1743
10°	1745	1731	1736
15°	1738	1721	1728
20°	1722	1704	1704
25°	1688	1670	1669
30°	1632	1616	1619
35°	1551	1533	1535
40°	1458	1433	1424
45°	1336	1318	1266
50°	1208	1175	1087
55°	1084	987	937
60°	950	795	824
65°	828	625	758
70°	758	546	758
75°	758	580	835
80°	823	683	952
85°	903	772	1022



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.4	4.2
10°-20°	349.4	12.0
20°-30°	518.1	17.8
30°-40°	584.5	20.1
40°-50°	529.4	18.2
50°-60°	381.9	13.1
60°-70°	228.0	7.8
70°-80°	140.9	4.8
80°-90°	59.4	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°	989.9	34.0
0°-40°	1574.4	54.0
0°-60°	2485.7	85.3
0°-90°	2914.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2914.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1293	1293	1293	1293	1293	
5°	1294	1292	1287	1286	1290	123
15°	1248	1240	1235	1236	1241	352
25°	1137	1131	1125	1121	1124	522
35°	944	943	933	934	935	591
45°	702	698	693	676	665	541
55°	462	448	421	400	399	413
65°	260	229	196	223	238	262
75°	146	126	112	139	161	156
85°	58	51	50	65	66	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1292.9	1292.9	1292.9	1292.9	1292.9
2.5°	1297.4	1293.8	1289.3	1292.0	1294.3
5°	1294.3	1292.5	1287.1	1285.7	1290.2
7.5°	1287.5	1283.0	1278.1	1280.3	1278.5
10°	1277.2	1273.1	1266.8	1267.2	1270.4
12.5°	1264.5	1259.6	1252.8	1254.6	1257.3
15°	1247.9	1240.2	1235.3	1235.7	1240.7
17.5°	1226.7	1220.9	1214.6	1215.9	1218.2
20°	1202.4	1199.3	1190.3	1187.6	1189.8
22.5°	1171.8	1166.0	1161.0	1159.7	1160.1
25°	1137.1	1130.8	1125.0	1120.9	1124.1
27.5°	1096.6	1091.2	1083.6	1082.2	1084.9
30°	1050.7	1046.7	1039.9	1038.1	1042.2
32.5°	1003.9	997.1	987.7	987.7	988.6
35°	944.0	942.7	933.2	933.7	934.6
37.5°	890.0	883.7	878.3	872.9	875.6
40°	830.1	822.9	815.7	812.1	810.8
42.5°	765.8	760.3	757.2	744.1	741.0
45°	702.3	697.8	692.8	675.7	665.4
47.5°	637.5	636.6	632.5	602.3	592.0
50°	577.1	575.8	561.4	529.4	519.1
52.5°	520.0	511.0	492.0	460.5	458.7
55°	462.3	447.9	420.9	400.2	399.3
57.5°	401.6	384.5	357.0	345.7	351.6
60°	352.9	326.8	295.3	296.7	306.1
62.5°	302.5	273.3	242.2	255.7	267.0
65°	260.2	229.1	196.3	222.8	238.1
67.5°	223.3	194.5	163.0	198.5	213.4
70°	192.7	169.3	138.7	176.0	192.7
72.5°	168.4	146.8	122.9	158.0	177.4
75°	145.9	126.5	111.6	139.1	160.7
77.5°	126.5	107.6	100.8	122.9	144.1
80°	106.2	89.1	88.2	107.1	122.9
82.5°	82.8	71.1	71.1	89.6	99.0
85°	58.5	51.3	50.0	65.3	66.2
87.5°	30.2	28.8	26.1	34.2	34.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)