

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: P293416

Luminaire Tested: **24GR-LD5-30-A-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293416
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-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3269.0 lumens
Efficiency: N/A
Efficacy: 155.5 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

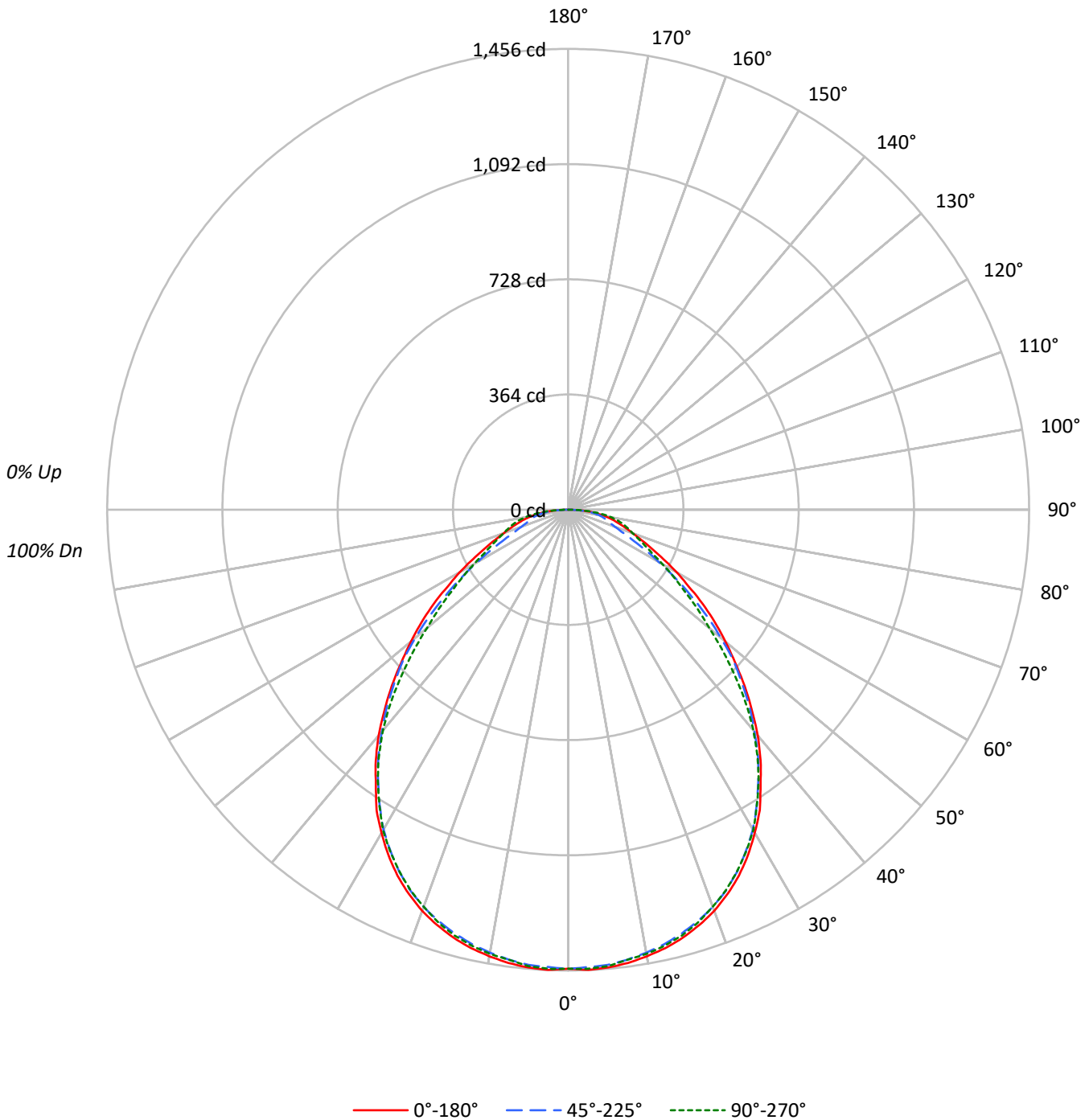
Input Watts (W): 21.018
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	1951	1951	1951
5°	1961	1950	1955
10°	1957	1942	1947
15°	1950	1930	1939
20°	1931	1912	1911
25°	1894	1874	1872
30°	1831	1812	1816
35°	1739	1720	1722
40°	1636	1607	1597
45°	1499	1479	1420
50°	1355	1318	1219
55°	1217	1108	1051
60°	1065	892	924
65°	929	701	851
70°	850	612	850
75°	850	651	937
80°	924	767	1068
85°	1014	866	1145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.3	4.2
10°-20°	392.0	12.0
20°-30°	581.2	17.8
30°-40°	655.7	20.1
40°-50°	593.8	18.2
50°-60°	428.4	13.1
60°-70°	255.8	7.8
70°-80°	158.1	4.8
80°-90°	66.6	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°	1110.5	34.0
0°-40°	1766.2	54.0
0°-60°	2788.5	85.3
0°-90°	3269.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3269.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1452	1450	1444	1442	1447	138
15°	1400	1391	1386	1386	1392	395
25°	1276	1269	1262	1258	1261	586
35°	1059	1058	1047	1047	1048	663
45°	788	783	777	758	746	607
55°	519	502	472	449	448	463
65°	292	257	220	250	267	294
75°	164	142	125	156	180	175
85°	66	58	56	73	74	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1450.4	1450.4	1450.4	1450.4	1450.4
2.5°	1455.5	1451.4	1446.4	1449.4	1451.9
5°	1451.9	1449.9	1443.9	1442.3	1447.4
7.5°	1444.4	1439.3	1433.8	1436.3	1434.3
10°	1432.7	1428.2	1421.1	1421.6	1425.2
12.5°	1418.6	1413.0	1405.5	1407.5	1410.5
15°	1399.9	1391.3	1385.8	1386.3	1391.8
17.5°	1376.2	1369.6	1362.5	1364.1	1366.6
20°	1348.9	1345.4	1335.3	1332.2	1334.8
22.5°	1314.6	1308.0	1302.4	1300.9	1301.4
25°	1275.7	1268.6	1262.0	1257.5	1261.0
27.5°	1230.2	1224.2	1215.6	1214.1	1217.1
30°	1178.7	1174.2	1166.6	1164.6	1169.1
32.5°	1126.2	1118.6	1108.0	1108.0	1109.0
35°	1059.0	1057.5	1046.9	1047.4	1048.4
37.5°	998.4	991.4	985.3	979.2	982.3
40°	931.3	923.2	915.1	911.1	909.5
42.5°	859.0	853.0	849.4	834.8	831.3
45°	787.8	782.8	777.2	758.0	746.4
47.5°	715.1	714.1	709.6	675.7	664.1
50°	647.4	645.9	629.8	593.9	582.3
52.5°	583.3	573.2	552.0	516.6	514.6
55°	518.7	502.5	472.2	449.0	448.0
57.5°	450.5	431.3	400.5	387.9	394.4
60°	395.9	366.6	331.3	332.8	343.4
62.5°	339.4	306.5	271.7	286.9	299.5
65°	291.9	257.1	220.2	250.0	267.2
67.5°	250.5	218.2	182.8	222.7	239.4
70°	216.1	189.9	155.5	197.5	216.1
72.5°	188.9	164.6	137.9	177.3	199.0
75°	163.6	141.9	125.2	156.1	180.3
77.5°	141.9	120.7	113.1	137.9	161.6
80°	119.2	100.0	99.0	120.2	137.9
82.5°	92.9	79.8	79.8	100.5	111.1
85°	65.7	57.6	56.1	73.2	74.2
87.5°	33.8	32.3	29.3	38.4	38.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)