

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: P391399

Luminaire Tested: **24CZ2-45VHE-RDP-UNV-L950-CD1-SWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P391399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45VHE-RDP-UNV-L950-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2745.7 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

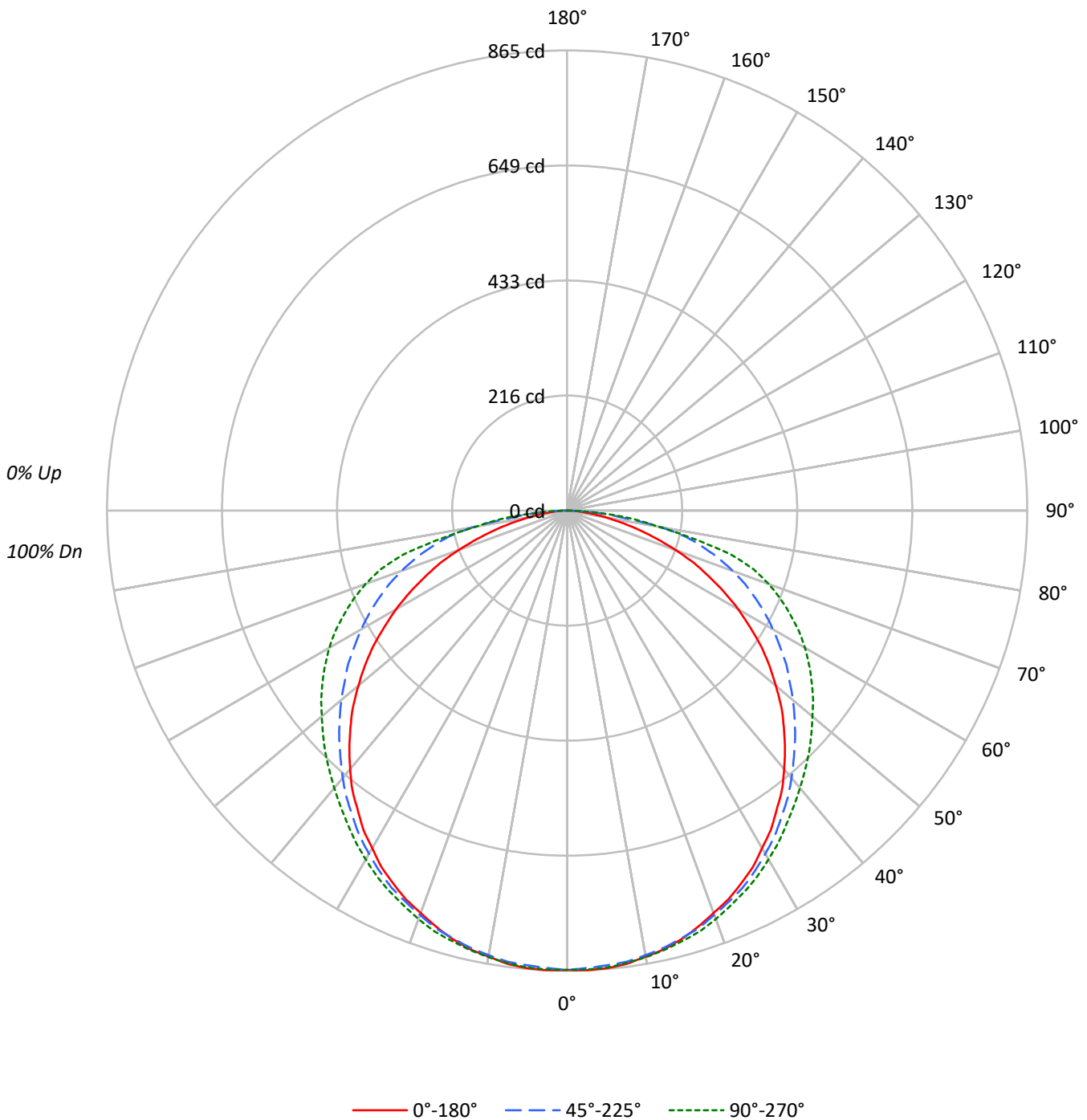
Input Watts (W): 29.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1162	1162	1162
5°	1166	1159	1164
10°	1163	1159	1165
15°	1161	1159	1167
20°	1152	1158	1170
25°	1148	1160	1173
30°	1138	1157	1176
35°	1127	1154	1181
40°	1115	1153	1196
45°	1096	1153	1223
50°	1072	1160	1260
55°	1045	1179	1316
60°	1001	1202	1389
65°	937	1245	1474
70°	852	1302	1586
75°	722	1373	1657
80°	570	1382	1340
85°	420	1051	1178



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.9	3.0
10°-20°	235.7	8.6
20°-30°	360.5	13.1
30°-40°	440.7	16.0
40°-50°	469.7	17.1
50°-60°	449.1	16.4
60°-70°	380.4	13.9
70°-80°	255.7	9.3
80°-90°	72.1	2.6
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°	678.1	24.7
0°-40°	1118.8	40.7
0°-60°	2037.5	74.2
0°-90°	2745.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2745.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	863	863	863	863	863	
5°	863	862	858	862	862	82
15°	834	834	832	839	838	235
25°	774	776	782	788	790	357
35°	686	692	703	716	719	430
45°	576	586	606	632	643	444
55°	445	462	502	542	561	397
65°	294	324	391	443	463	292
75°	139	189	264	309	319	149
85°	27	56	68	74	76	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	863.4	863.4	863.4	863.4	863.4
2.5°	864.8	864.8	860.7	863.4	863.4
5°	863.4	862.1	858.0	862.1	862.1
7.5°	859.4	858.0	855.3	859.4	858.0
10°	851.2	851.2	848.5	852.5	852.5
12.5°	844.4	843.0	841.7	847.1	845.7
15°	833.5	833.5	832.1	838.9	837.6
17.5°	819.9	821.2	822.6	828.0	829.4
20°	804.9	807.6	809.0	817.1	817.1
22.5°	791.3	792.6	795.3	803.5	803.5
25°	773.6	776.3	781.7	788.5	789.9
27.5°	755.9	757.2	764.0	773.6	774.9
30°	732.7	736.8	745.0	755.9	757.2
32.5°	712.3	716.4	725.9	736.8	739.5
35°	686.4	691.8	702.7	716.4	719.1
37.5°	663.2	667.3	680.9	695.9	700.0
40°	634.6	642.8	656.4	674.1	680.9
42.5°	606.0	614.2	630.6	653.7	661.9
45°	576.1	585.6	606.0	631.9	642.8
47.5°	546.1	557.0	580.2	610.1	622.4
50°	512.1	525.7	554.3	588.3	602.0
52.5°	479.4	495.7	527.1	565.2	582.9
55°	445.3	461.7	502.5	542.0	561.1
57.5°	407.2	429.0	473.9	518.9	539.3
60°	371.8	392.2	446.7	495.7	516.2
62.5°	333.7	360.9	419.5	471.2	491.6
65°	294.2	324.1	390.9	442.6	463.0
67.5°	258.8	291.4	362.3	414.0	434.4
70°	216.5	257.4	330.9	382.7	403.1
72.5°	177.0	222.0	298.3	348.6	367.7
75°	138.9	189.3	264.2	309.2	318.7
77.5°	103.5	156.6	228.8	247.9	241.1
80°	73.5	125.3	178.4	168.9	173.0
82.5°	47.7	95.3	110.3	125.3	129.4
85°	27.2	55.8	68.1	73.5	76.3
87.5°	12.3	20.4	27.2	27.2	25.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)