

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: P391491

Luminaire Tested: **24CZ2-55VHE-RDP-UNV-L940-CD1-SDWPD1-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: P391491
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: 24CZ2-55VHE-RDP-UNV-L940-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3122.3 lumens
Efficiency: N/A
Efficacy: 86.5 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

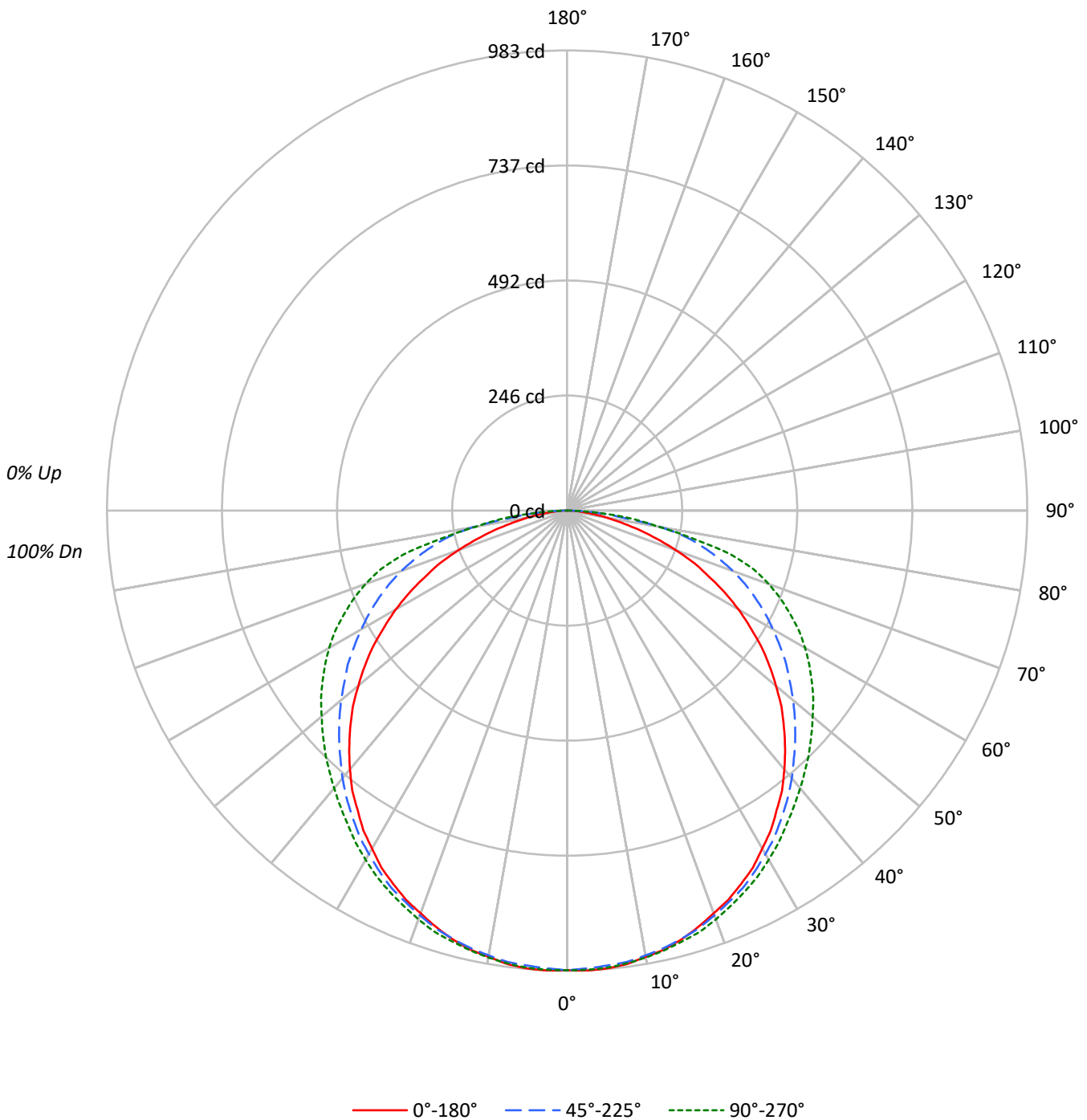
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1321	1321	1321
5°	1326	1318	1324
10°	1322	1318	1325
15°	1320	1318	1327
20°	1311	1317	1330
25°	1306	1320	1333
30°	1294	1316	1338
35°	1282	1313	1343
40°	1268	1311	1360
45°	1247	1311	1391
50°	1219	1319	1433
55°	1188	1341	1497
60°	1138	1367	1580
65°	1065	1415	1677
70°	969	1480	1803
75°	821	1562	1884
80°	648	1572	1524
85°	479	1195	1338



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.1	3.0
10°-20°	268.1	8.6
20°-30°	409.9	13.1
30°-40°	501.1	16.0
40°-50°	534.1	17.1
50°-60°	510.6	16.4
60°-70°	432.6	13.9
70°-80°	290.7	9.3
80°-90°	82.0	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°	771.1	24.7
0°-40°	1272.2	40.7
0°-60°	2316.9	74.2
0°-90°	3122.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3122.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	982	980	976	980	980	93
15°	948	948	946	954	952	267
25°	880	883	889	897	898	405
35°	780	787	799	815	818	489
45°	655	666	689	719	731	505
55°	506	525	572	616	638	451
65°	334	369	444	503	527	332
75°	158	215	300	352	362	169
85°	31	64	77	84	87	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	981.9	981.9	981.9	981.9	981.9
2.5°	983.4	983.4	978.8	981.9	981.9
5°	981.9	980.3	975.7	980.3	980.3
7.5°	977.2	975.7	972.6	977.2	975.7
10°	967.9	967.9	964.8	969.5	969.5
12.5°	960.2	958.6	957.1	963.3	961.7
15°	947.8	947.8	946.3	954.0	952.4
17.5°	932.3	933.9	935.4	941.6	943.2
20°	915.3	918.4	919.9	929.2	929.2
22.5°	899.8	901.3	904.4	913.7	913.7
25°	879.7	882.8	889.0	896.7	898.2
27.5°	859.5	861.1	868.8	879.7	881.2
30°	833.2	837.8	847.1	859.5	861.1
32.5°	810.0	814.6	825.5	837.8	840.9
35°	780.5	786.7	799.1	814.6	817.7
37.5°	754.2	758.9	774.3	791.4	796.0
40°	721.7	731.0	746.5	766.6	774.3
42.5°	689.2	698.5	717.0	743.4	752.7
45°	655.1	665.9	689.2	718.6	731.0
47.5°	621.0	633.4	659.7	693.8	707.8
50°	582.3	597.8	630.3	669.0	684.5
52.5°	545.1	563.7	599.3	642.7	662.8
55°	506.4	525.0	571.5	616.4	638.1
57.5°	463.1	487.8	538.9	590.1	613.3
60°	422.8	446.0	508.0	563.7	587.0
62.5°	379.4	410.4	477.0	535.8	559.1
65°	334.5	368.6	444.5	503.3	526.6
67.5°	294.3	331.4	412.0	470.8	494.0
70°	246.2	292.7	376.3	435.2	458.4
72.5°	201.3	252.4	339.2	396.5	418.1
75°	158.0	215.3	300.4	351.6	362.4
77.5°	117.7	178.1	260.2	281.9	274.1
80°	83.6	142.5	202.9	192.0	196.7
82.5°	54.2	108.4	125.4	142.5	147.1
85°	31.0	63.5	77.4	83.6	86.7
87.5°	13.9	23.2	31.0	31.0	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)