

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: P391492

Luminaire Tested: **24CZ2-55VHE-RDP-UNV-L940-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: P391492  
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-SWPD1-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: 3160.4 lumens  
Efficiency: N/A  
Efficacy: 87.5 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

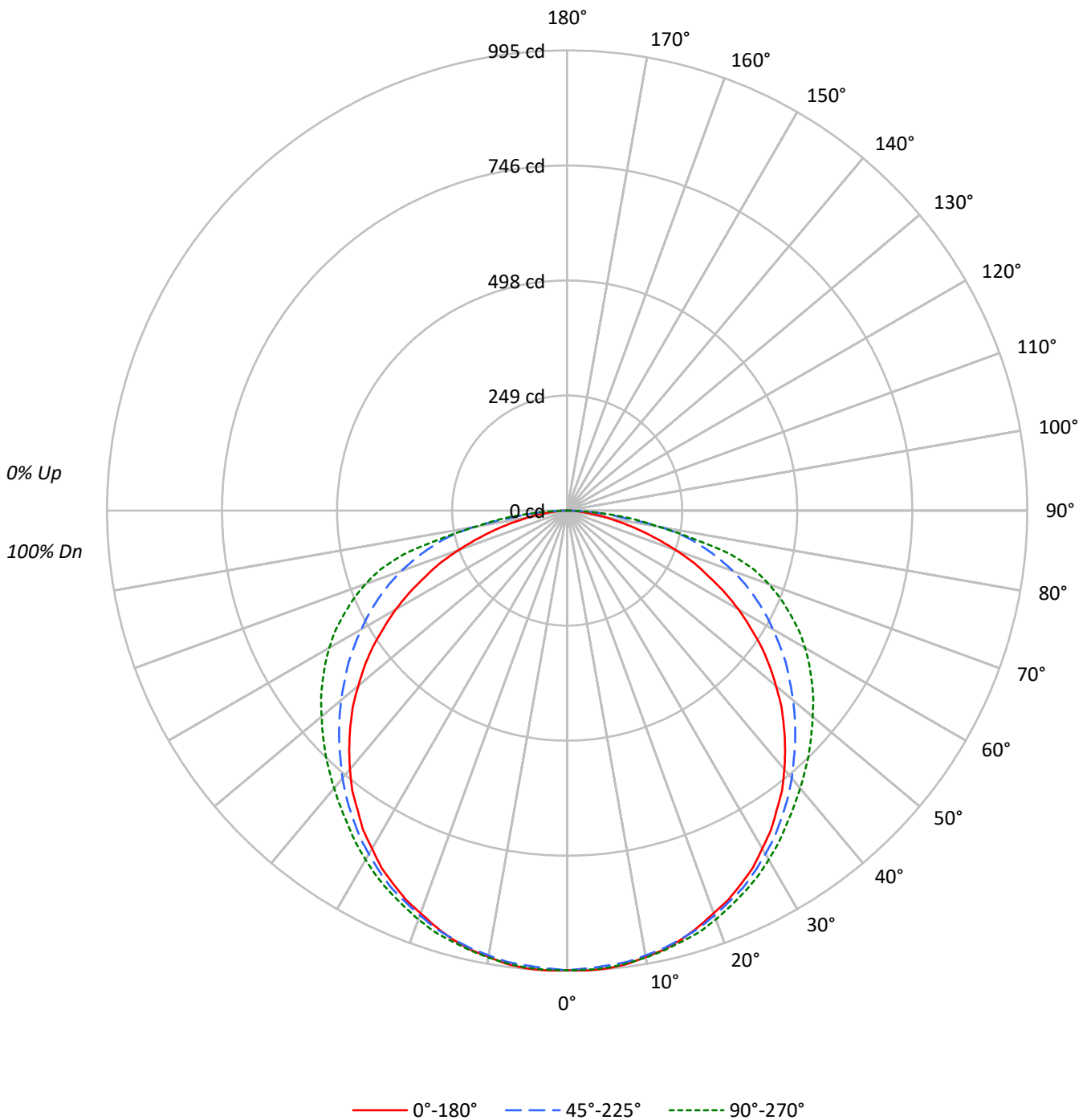
Input Watts (W): 36.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1337	1337	1337
5°	1342	1334	1340
10°	1339	1334	1341
15°	1336	1334	1343
20°	1326	1333	1347
25°	1322	1336	1350
30°	1310	1332	1354
35°	1298	1329	1360
40°	1283	1327	1377
45°	1262	1327	1408
50°	1234	1335	1450
55°	1202	1357	1515
60°	1152	1384	1599
65°	1078	1432	1697
70°	980	1498	1825
75°	831	1581	1907
80°	656	1592	1543
85°	485	1210	1355



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.3	3.0
10°-20°	271.3	8.6
20°-30°	414.9	13.1
30°-40°	507.2	16.0
40°-50°	540.6	17.1
50°-60°	516.9	16.4
60°-70°	437.9	13.9
70°-80°	294.3	9.3
80°-90°	83.0	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°	780.5	24.7
0°-40°	1287.8	40.7
0°-60°	2345.3	74.2
0°-90°	3160.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3160.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	994	994	994	994	994	
5°	994	992	988	992	992	94
15°	959	959	958	966	964	270
25°	890	894	900	908	909	410
35°	790	796	809	825	828	495
45°	663	674	698	727	740	511
55°	513	531	578	624	646	457
65°	339	373	450	510	533	336
75°	160	218	304	356	367	171
85°	31	64	78	85	88	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	993.9	993.9	993.9	993.9	993.9
2.5°	995.4	995.4	990.7	993.9	993.9
5°	993.9	992.3	987.6	992.3	992.3
7.5°	989.2	987.6	984.4	989.2	987.6
10°	979.7	979.7	976.6	981.3	981.3
12.5°	971.9	970.3	968.8	975.0	973.5
15°	959.4	959.4	957.8	965.6	964.1
17.5°	943.7	945.3	946.8	953.1	954.7
20°	926.4	929.6	931.2	940.6	940.6
22.5°	910.8	912.3	915.5	924.9	924.9
25°	890.4	893.5	899.8	907.6	909.2
27.5°	870.0	871.6	879.4	890.4	892.0
30°	843.4	848.1	857.5	870.0	871.6
32.5°	819.9	824.6	835.5	848.1	851.2
35°	790.1	796.3	808.9	824.6	827.7
37.5°	763.4	768.1	783.8	801.0	805.7
40°	730.5	739.9	755.6	776.0	783.8
42.5°	697.6	707.0	725.8	752.4	761.9
45°	663.1	674.1	697.6	727.4	739.9
47.5°	628.6	641.1	667.8	702.3	716.4
50°	589.4	605.1	638.0	677.2	692.9
52.5°	551.8	570.6	606.7	650.6	670.9
55°	512.6	531.4	578.4	623.9	645.8
57.5°	468.7	493.8	545.5	597.3	620.8
60°	428.0	451.5	514.2	570.6	594.1
62.5°	384.1	415.4	482.8	542.4	565.9
65°	338.6	373.1	449.9	509.5	533.0
67.5°	297.8	335.5	417.0	476.5	500.1
70°	249.2	296.3	380.9	440.5	464.0
72.5°	203.8	255.5	343.3	401.3	423.3
75°	159.9	217.9	304.1	355.8	366.8
77.5°	119.1	180.3	263.4	285.3	277.5
80°	84.7	144.2	205.4	194.4	199.1
82.5°	54.9	109.7	127.0	144.2	148.9
85°	31.4	64.3	78.4	84.7	87.8
87.5°	14.1	23.5	31.4	31.4	29.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)