

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: P391495

Luminaire Tested: **24CZ2-55VHE-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: P391495  
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-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: 3354.5 lumens  
Efficiency: N/A  
Efficacy: 92.9 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

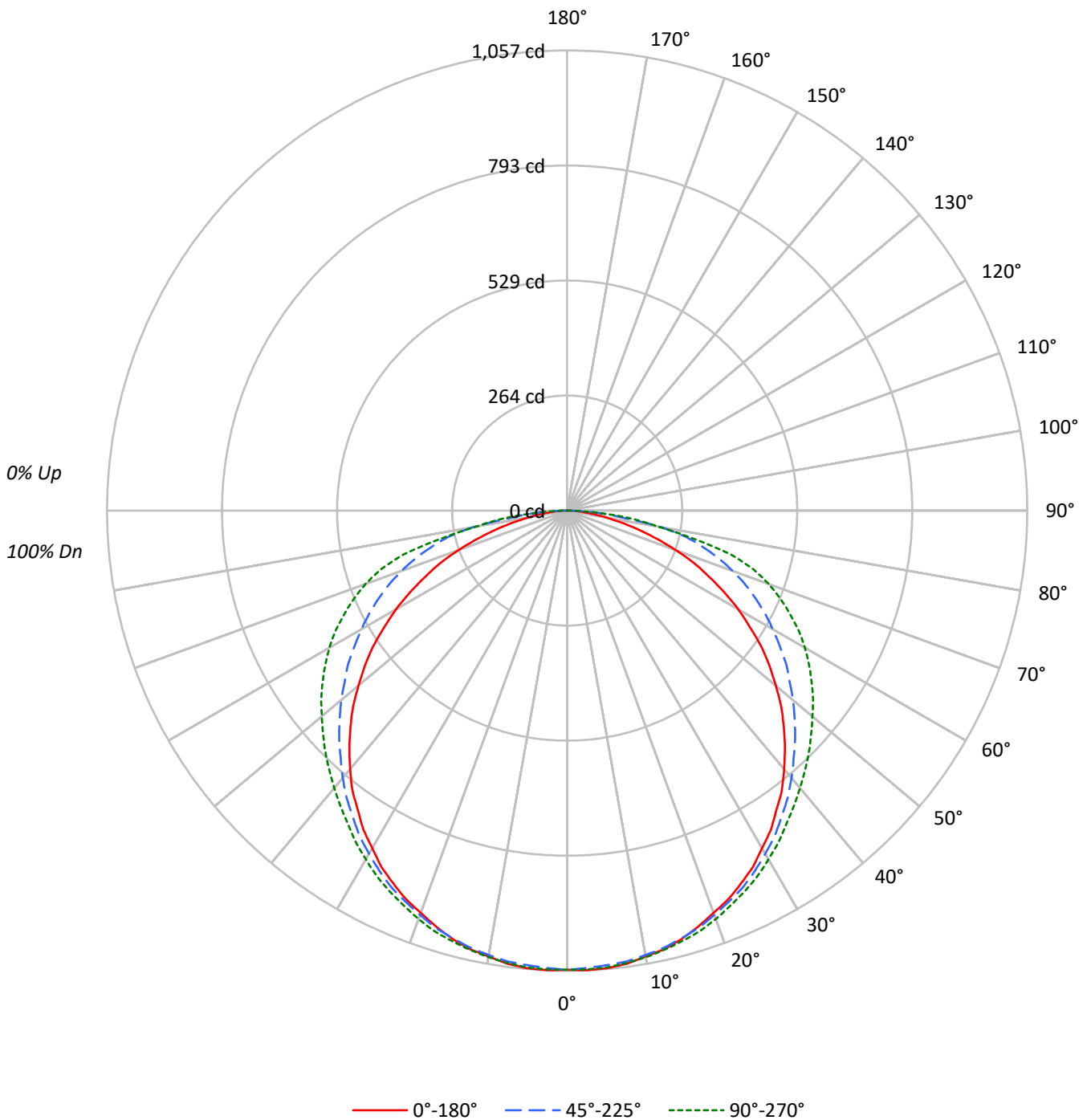
Input Watts (W): 36.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1419	1419	1419
5°	1425	1416	1422
10°	1421	1416	1423
15°	1418	1416	1425
20°	1408	1415	1429
25°	1403	1418	1433
30°	1391	1414	1437
35°	1377	1410	1443
40°	1362	1409	1461
45°	1339	1409	1494
50°	1310	1418	1539
55°	1276	1440	1608
60°	1222	1468	1697
65°	1144	1520	1801
70°	1041	1590	1937
75°	882	1678	2024
80°	696	1689	1637
85°	514	1284	1439



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.1	3.0
10°-20°	288.0	8.6
20°-30°	440.4	13.1
30°-40°	538.4	16.0
40°-50°	573.8	17.1
50°-60°	548.6	16.4
60°-70°	464.8	13.9
70°-80°	312.4	9.3
80°-90°	88.1	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°	828.5	24.7
0°-40°	1366.8	40.7
0°-60°	2489.3	74.2
0°-90°	3354.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3354.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1055	1055	1055	1055	1055	
5°	1055	1053	1048	1053	1053	100
15°	1018	1018	1017	1025	1023	287
25°	945	948	955	963	965	436
35°	839	845	859	875	878	525
45°	704	716	740	772	785	543
55°	544	564	614	662	686	485
65°	359	396	478	541	566	357
75°	170	231	323	378	389	182
85°	33	68	83	90	93	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1054.9	1054.9	1054.9	1054.9	1054.9
2.5°	1056.6	1056.6	1051.6	1054.9	1054.9
5°	1054.9	1053.2	1048.2	1053.2	1053.2
7.5°	1049.9	1048.2	1044.9	1049.9	1048.2
10°	1039.9	1039.9	1036.6	1041.6	1041.6
12.5°	1031.6	1029.9	1028.3	1034.9	1033.3
15°	1018.3	1018.3	1016.6	1024.9	1023.3
17.5°	1001.7	1003.3	1005.0	1011.6	1013.3
20°	983.3	986.7	988.3	998.3	998.3
22.5°	966.7	968.4	971.7	981.7	981.7
25°	945.1	948.4	955.1	963.4	965.0
27.5°	923.4	925.1	933.4	945.1	946.7
30°	895.2	900.2	910.1	923.4	925.1
32.5°	870.2	875.2	886.8	900.2	903.5
35°	838.6	845.2	858.6	875.2	878.5
37.5°	810.3	815.3	831.9	850.2	855.2
40°	775.4	785.3	802.0	823.6	831.9
42.5°	740.4	750.4	770.4	798.7	808.6
45°	703.8	715.5	740.4	772.0	785.3
47.5°	667.2	680.5	708.8	745.4	760.4
50°	625.6	642.3	677.2	718.8	735.4
52.5°	585.7	605.6	643.9	690.5	712.1
55°	544.1	564.1	614.0	662.2	685.5
57.5°	497.5	524.1	579.0	633.9	658.9
60°	454.2	479.2	545.7	605.6	630.6
62.5°	407.6	440.9	512.5	575.7	600.7
65°	359.4	396.0	477.5	540.8	565.7
67.5°	316.1	356.1	442.6	505.8	530.8
70°	264.6	314.5	404.3	467.5	492.5
72.5°	216.3	271.2	364.4	426.0	449.2
75°	169.7	231.3	322.8	377.7	389.3
77.5°	126.5	191.3	279.5	302.8	294.5
80°	89.8	153.1	218.0	206.3	211.3
82.5°	58.2	116.5	134.8	153.1	158.1
85°	33.3	68.2	83.2	89.8	93.2
87.5°	15.0	25.0	33.3	33.3	31.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)