

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: P390677

Luminaire Tested: **22CZ2-75VHE-RDP-UNV-L940-CD1-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: P390677
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-75VHE-RDP-UNV-L940-CD1-U
Description: 2x2 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: 4341.7 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

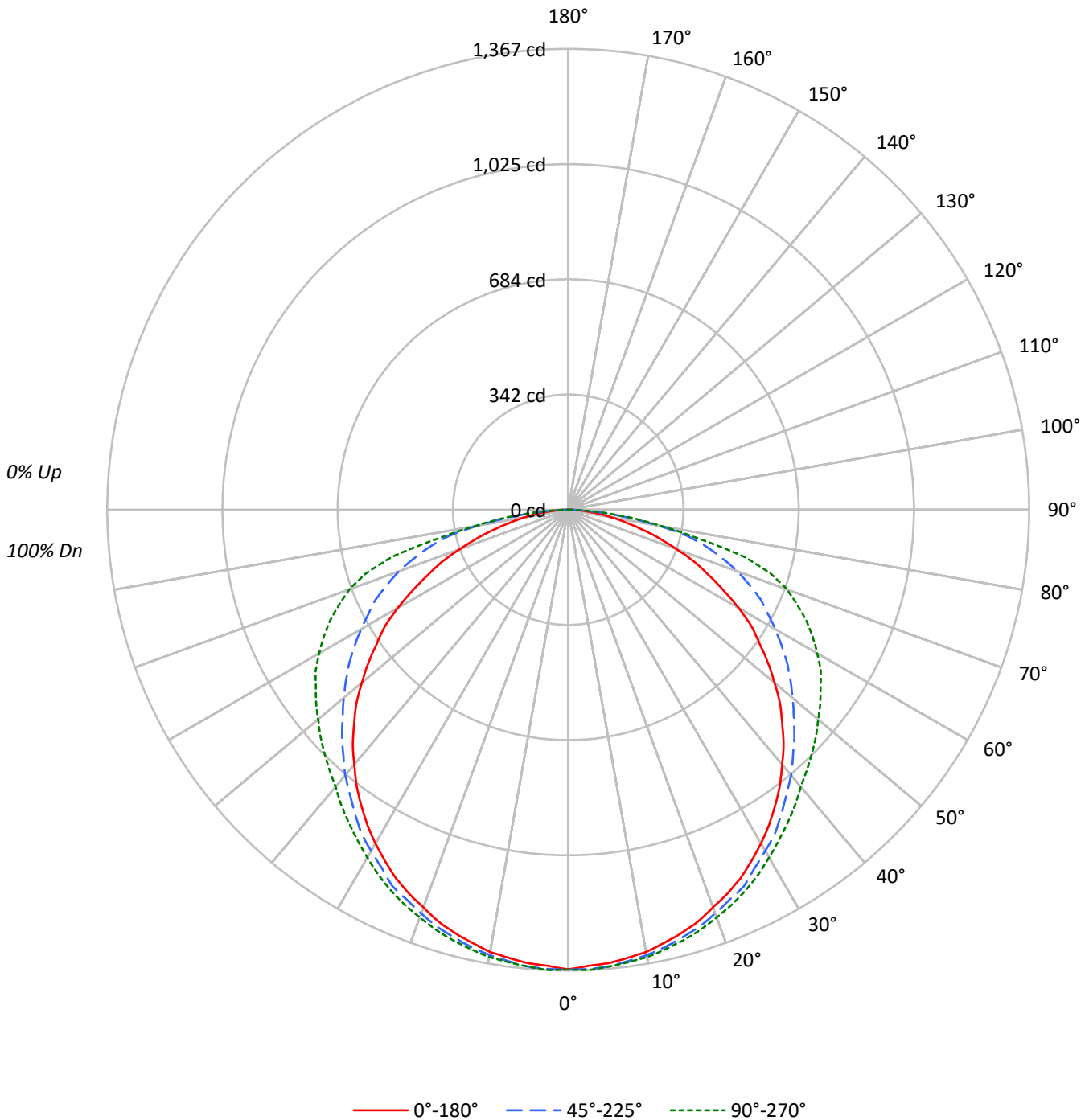
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	3670	3670	3670
5°	3649	3675	3675
10°	3639	3665	3683
15°	3621	3657	3684
20°	3594	3649	3686
25°	3585	3661	3698
30°	3553	3632	3702
35°	3515	3620	3725
40°	3467	3613	3770
45°	3416	3610	3890
50°	3343	3637	4052
55°	3252	3716	4286
60°	3146	3816	4590
65°	2928	4006	4962
70°	2688	4197	5428
75°	2358	4417	5612
80°	2030	4207	4406
85°	1775	3057	3353



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.0	3.0
10°-20°	370.4	8.5
20°-30°	565.1	13.0
30°-40°	690.0	15.9
40°-50°	737.8	17.0
50°-60°	712.1	16.4
60°-70°	613.0	14.1
70°-80°	414.8	9.6
80°-90°	109.4	2.5
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°	1064.5	24.5
0°-40°	1754.5	40.4
0°-60°	3204.5	73.8
0°-90°	4341.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4341.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1364	1364	1364	1364	1364	
5°	1351	1354	1361	1361	1361	128
15°	1300	1303	1313	1319	1322	367
25°	1207	1214	1233	1239	1246	556
35°	1070	1080	1102	1124	1134	669
45°	898	914	949	996	1022	693
55°	693	715	792	872	914	621
65°	460	505	629	728	779	457
75°	227	300	425	511	540	243
85°	58	80	99	102	109	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1363.8	1363.8	1363.8	1363.8	<i>1363.8</i>
2.5°	<i>1354.2</i>	<i>1357.4</i>	<i>1363.8</i>	<i>1363.8</i>	<i>1367.0</i>
5°	1351.0	1354.2	1360.6	1360.6	<i>1360.6</i>
7.5°	1341.4	1344.6	1351.0	1354.2	<i>1354.2</i>
10°	1331.9	1335.1	1341.4	1344.6	<i>1347.8</i>
12.5°	1315.9	1319.1	1328.7	1335.1	<i>1335.1</i>
15°	1299.9	1303.1	1312.7	1319.1	<i>1322.3</i>
17.5°	1280.8	1287.1	1296.7	1303.1	<i>1306.3</i>
20°	1255.2	1261.6	1274.4	1284.0	<i>1287.1</i>
22.5°	1232.9	1239.2	1252.0	1261.6	<i>1268.0</i>
25°	1207.3	1213.7	1232.9	1239.2	<i>1245.6</i>
27.5°	1175.4	1181.8	1197.7	1210.5	<i>1220.1</i>
30°	1143.4	1149.8	1169.0	1184.9	<i>1191.3</i>
32.5°	1108.3	1117.9	1140.2	1153.0	<i>1162.6</i>
35°	1070.0	1079.5	1101.9	1124.3	<i>1133.8</i>
37.5°	1031.6	1041.2	1063.6	1092.3	<i>1105.1</i>
40°	986.9	999.7	1028.4	1066.8	<i>1073.2</i>
42.5°	945.4	961.4	986.9	1031.6	<i>1047.6</i>
45°	897.5	913.5	948.6	996.5	<i>1022.1</i>
47.5°	852.8	868.7	907.1	964.6	<i>996.5</i>
50°	798.5	820.8	868.7	935.8	<i>967.8</i>
52.5°	747.4	766.5	830.4	903.9	<i>942.2</i>
55°	693.1	715.4	792.1	871.9	<i>913.5</i>
57.5°	645.2	664.3	750.6	840.0	<i>887.9</i>
60°	584.5	610.0	709.1	804.9	<i>852.8</i>
62.5°	520.6	558.9	667.5	766.5	<i>817.6</i>
65°	459.9	504.6	629.2	728.2	<i>779.3</i>
67.5°	405.6	453.5	581.3	686.7	<i>734.6</i>
70°	341.7	402.4	533.4	635.6	<i>689.9</i>
72.5°	284.3	351.3	479.1	581.3	<i>629.2</i>
75°	226.8	300.2	424.8	511.0	<i>539.8</i>
77.5°	175.7	245.9	364.1	389.7	<i>392.9</i>
80°	131.0	194.8	271.5	274.7	<i>284.3</i>
82.5°	89.4	137.3	175.7	191.6	<i>194.8</i>
85°	57.5	79.8	99.0	102.2	<i>108.6</i>
87.5°	25.6	28.7	35.1	31.9	<i>31.9</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)