

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: P390771

Luminaire Tested: **22CZ2-85VHE-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: P390771
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: 22CZ2-85VHE-RDP-UNV-L940-CD1-SDWPD1-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: 4829.1 lumens
Efficiency: N/A
Efficacy: 75.9 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

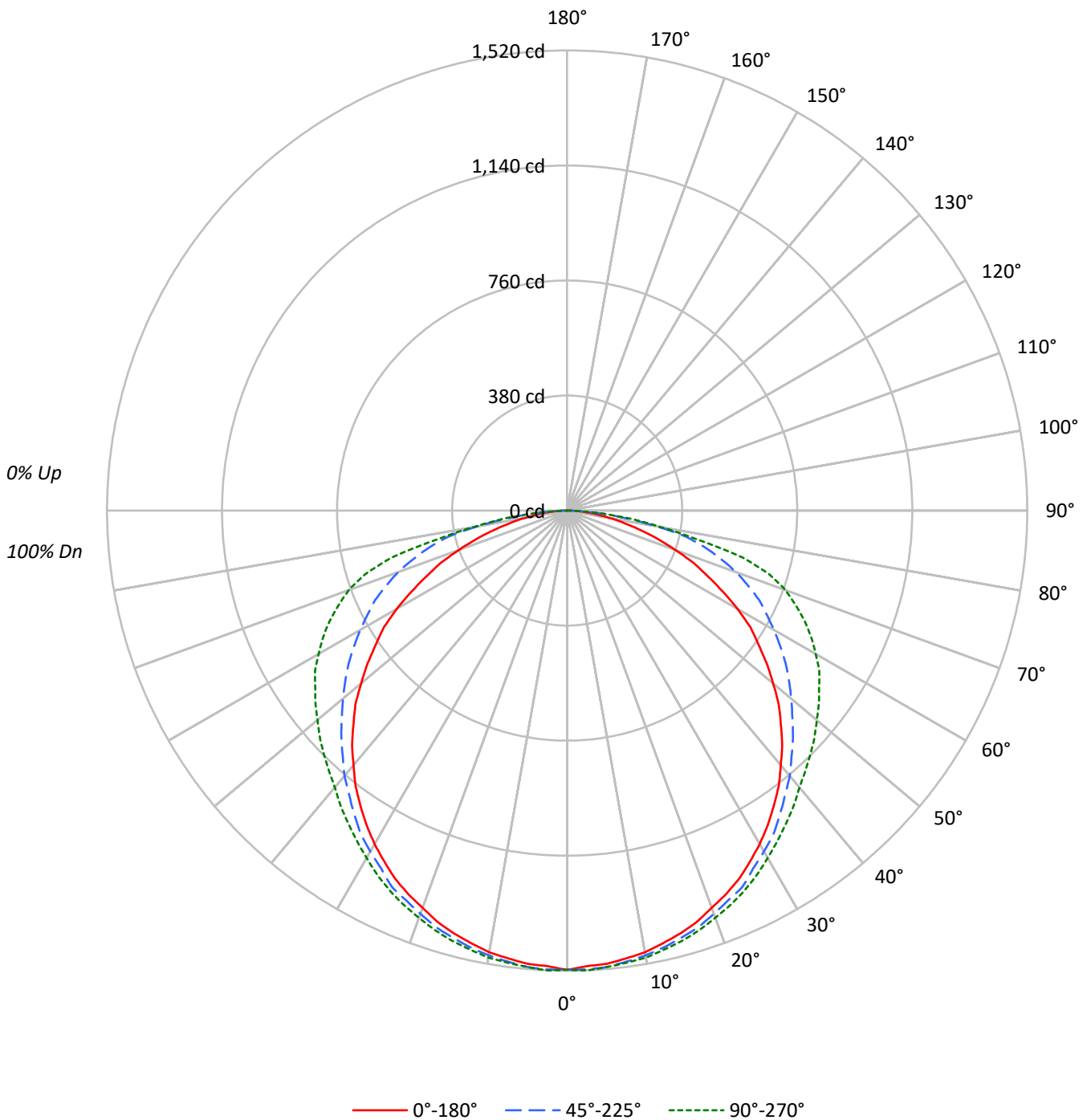
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390771

CATALOG NUMBER: 22CZ2-85VHE-RDP-UNV-L940-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390771

CATALOG NUMBER: 22CZ2-85VHE-RDP-UNV-L940-CD1-SDWPD1-U

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°	4082	4082	4082
5°	4059	4088	4088
10°	4048	4077	4096
15°	4028	4068	4097
20°	3998	4059	4100
25°	3987	4072	4114
30°	3952	4040	4117
35°	3910	4026	4143
40°	3856	4018	4193
45°	3799	4015	4326
50°	3718	4045	4506
55°	3617	4133	4767
60°	3499	4244	5105
65°	3258	4456	5519
70°	2991	4668	6037
75°	2622	4913	6242
80°	2258	4680	4900
85°	1973	3399	3730



TEST NUMBER: P390771

CATALOG NUMBER: 22CZ2-85VHE-RDP-UNV-L940-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.5	3.0
10°-20°	412.0	8.5
20°-30°	628.6	13.0
30°-40°	767.5	15.9
40°-50°	820.6	17.0
50°-60°	792.1	16.4
60°-70°	681.8	14.1
70°-80°	461.3	9.6
80°-90°	121.7	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°	1184.0	24.5
0°-40°	1951.5	40.4
0°-60°	3564.2	73.8
0°-90°	4829.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4829.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1517	1517	1517	1517	1517	
5°	1503	1506	1513	1513	1513	143
15°	1446	1449	1460	1467	1471	408
25°	1343	1350	1371	1378	1386	618
35°	1190	1201	1226	1250	1261	745
45°	998	1016	1055	1108	1137	771
55°	771	796	881	970	1016	691
65°	512	561	700	810	867	509
75°	252	334	472	568	600	271
85°	64	89	110	114	121	72
90°	0	0	0	0	0	



TEST NUMBER: P390771

CATALOG NUMBER: 22CZ2-85VHE-RDP-UNV-L940-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1516.9	1516.9	1516.9	1516.9	1516.9
2.5°	1506.2	1509.8	1516.9	1516.9	1520.5
5°	1502.7	1506.2	1513.4	1513.4	1513.4
7.5°	1492.0	1495.6	1502.7	1506.2	1506.2
10°	1481.4	1484.9	1492.0	1495.6	1499.1
12.5°	1463.6	1467.2	1477.8	1484.9	1484.9
15°	1445.9	1449.4	1460.1	1467.2	1470.7
17.5°	1424.5	1431.6	1442.3	1449.4	1453.0
20°	1396.1	1403.2	1417.4	1428.1	1431.6
22.5°	1371.3	1378.4	1392.6	1403.2	1410.3
25°	1342.8	1349.9	1371.3	1378.4	1385.5
27.5°	1307.3	1314.4	1332.2	1346.4	1357.0
30°	1271.8	1278.9	1300.2	1318.0	1325.1
32.5°	1232.7	1243.4	1268.2	1282.4	1293.1
35°	1190.1	1200.7	1225.6	1250.5	1261.1
37.5°	1147.4	1158.1	1183.0	1214.9	1229.2
40°	1097.7	1111.9	1143.9	1186.5	1193.6
42.5°	1051.5	1069.3	1097.7	1147.4	1165.2
45°	998.2	1016.0	1055.1	1108.4	1136.8
47.5°	948.5	966.3	1008.9	1072.8	1108.4
50°	888.1	913.0	966.3	1040.9	1076.4
52.5°	831.3	852.6	923.6	1005.3	1048.0
55°	770.9	795.8	881.0	969.8	1016.0
57.5°	717.6	738.9	834.8	934.3	987.6
60°	650.1	678.5	788.6	895.2	948.5
62.5°	579.1	621.7	742.5	852.6	909.4
65°	511.6	561.3	699.8	810.0	866.8
67.5°	451.2	504.5	646.5	763.8	817.1
70°	380.1	447.6	593.3	706.9	767.3
72.5°	316.2	390.8	532.9	646.5	699.8
75°	252.2	333.9	472.5	568.4	600.4
77.5°	195.4	273.5	405.0	433.4	437.0
80°	145.7	216.7	302.0	305.5	316.2
82.5°	99.5	152.8	195.4	213.1	216.7
85°	63.9	88.8	110.1	113.7	120.8
87.5°	28.4	32.0	39.1	35.5	35.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)