

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: P388134

Luminaire Tested: **22CZ2-65VHE-SQR-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: P388134
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-65VHE-SQR-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5250.0 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

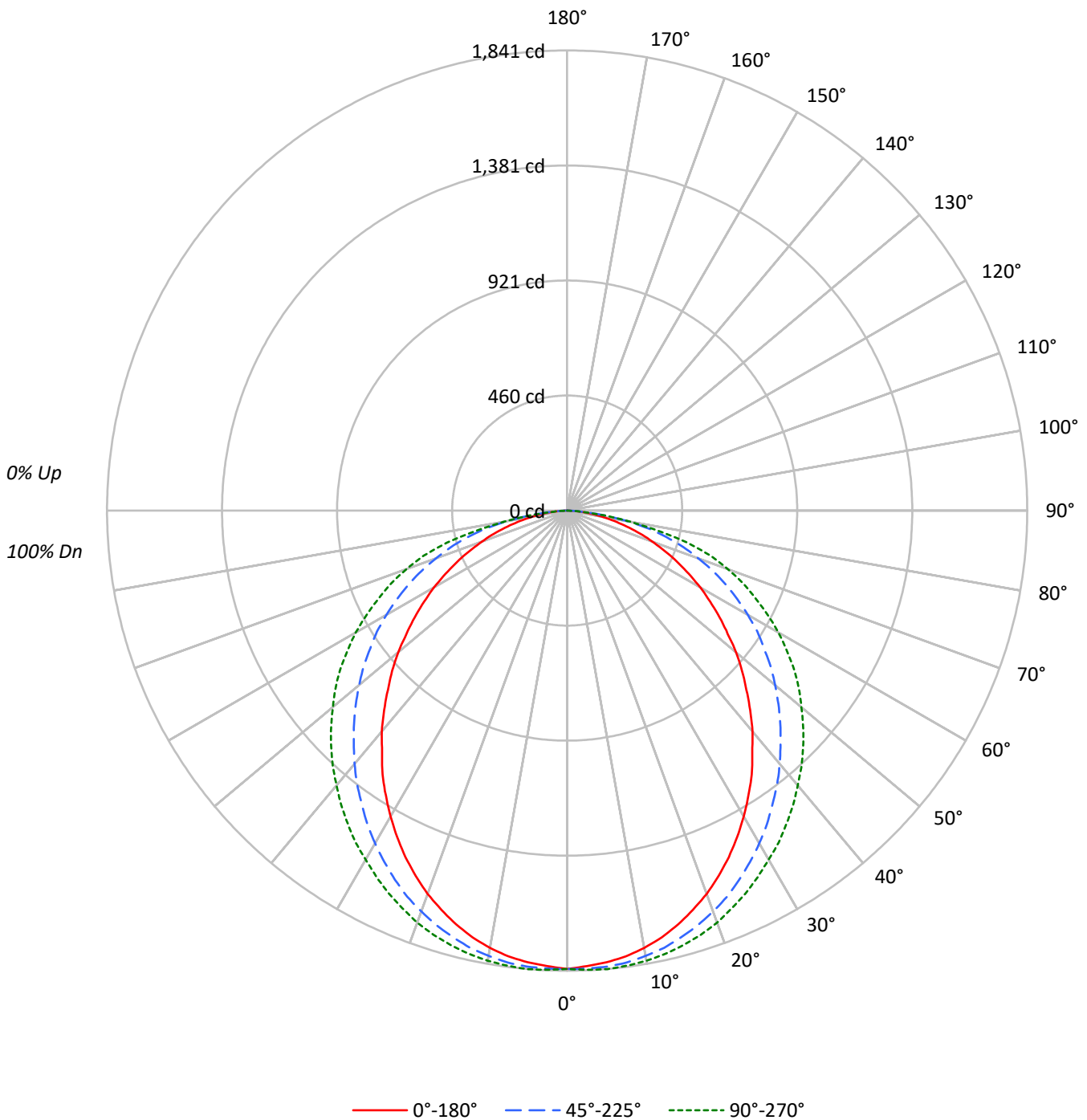
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4935	4935	4935
5°	4900	4947	4974
10°	4855	4943	4998
15°	4776	4922	5012
20°	4674	4888	5023
25°	4543	4839	5016
30°	4390	4777	5010
35°	4232	4707	5026
40°	4053	4648	5042
45°	3860	4590	5083
50°	3693	4548	5122
55°	3495	4512	5202
60°	3313	4492	5257
65°	3094	4458	5300
70°	2843	4392	5371
75°	2565	4274	5182
80°	2201	3784	3901
85°	1769	2232	1769



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.9	3.3
10°-20°	497.1	9.5
20°-30°	746.6	14.2
30°-40°	890.4	17.0
40°-50°	920.6	17.5
50°-60°	846.4	16.1
60°-70°	673.8	12.8
70°-80°	411.7	7.8
80°-90°	89.5	1.7
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°	1417.6	27.0
0°-40°	2308.0	44.0
0°-60°	4075.0	77.6
0°-90°	5250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1834	1834	1834	1834	1834	
5°	1814	1819	1832	1839	1841	172
15°	1714	1734	1767	1792	1799	483
25°	1530	1567	1630	1674	1689	704
35°	1288	1343	1433	1508	1530	804
45°	1014	1086	1206	1303	1336	784
55°	745	827	962	1072	1109	666
65°	486	568	700	797	832	481
75°	247	319	411	483	498	263
85°	57	70	72	62	57	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1834.0	1834.0	1834.0	1834.0	1834.0
2.5°	1824.0	1826.5	1834.0	1838.9	1838.9
5°	1814.0	1819.0	1831.5	1838.9	1841.4
7.5°	1799.1	1806.5	1824.0	1834.0	1836.4
10°	1776.6	1786.6	1809.0	1824.0	1829.0
12.5°	1749.2	1764.2	1791.6	1811.5	1816.5
15°	1714.3	1734.3	1766.7	1791.6	1799.1
17.5°	1674.5	1699.4	1739.3	1769.2	1779.1
20°	1632.1	1657.0	1706.9	1741.8	1754.2
22.5°	1582.3	1614.7	1672.0	1711.9	1721.8
25°	1530.0	1567.3	1629.6	1674.5	1689.4
27.5°	1472.6	1517.5	1584.8	1639.6	1652.1
30°	1412.8	1460.2	1537.4	1597.2	1612.2
32.5°	1350.5	1405.4	1487.6	1554.9	1574.8
35°	1288.3	1343.1	1432.8	1507.5	1530.0
37.5°	1216.0	1280.8	1380.4	1457.7	1485.1
40°	1153.7	1216.0	1323.1	1407.9	1435.3
42.5°	1083.9	1151.2	1263.3	1355.5	1387.9
45°	1014.2	1086.4	1206.0	1303.2	1335.6
47.5°	949.4	1021.6	1146.2	1248.4	1280.8
50°	882.1	956.8	1086.4	1191.1	1223.5
52.5°	809.8	892.1	1026.6	1131.3	1168.6
55°	745.0	827.3	961.8	1071.5	1108.8
57.5°	677.8	762.5	902.0	1006.7	1041.6
60°	615.5	697.7	834.7	936.9	976.8
62.5°	548.2	632.9	767.5	867.1	904.5
65°	485.9	568.1	700.2	797.4	832.3
67.5°	423.6	505.8	630.4	722.6	762.5
70°	361.3	443.5	558.2	647.9	682.7
72.5°	306.5	378.8	488.4	570.6	603.0
75°	246.7	318.9	411.1	483.4	498.4
77.5°	191.9	256.7	333.9	366.3	371.3
80°	142.0	191.9	244.2	251.7	251.7
82.5°	94.7	132.1	152.0	154.5	152.0
85°	57.3	69.8	72.3	62.3	57.3
87.5°	19.9	19.9	12.5	7.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)