

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: P387563

Luminaire Tested: **14CZ2-48HE-SQR-UNV-L950-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: P387563
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-48HE-SQR-UNV-L950-CD1-U
Description: 1x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

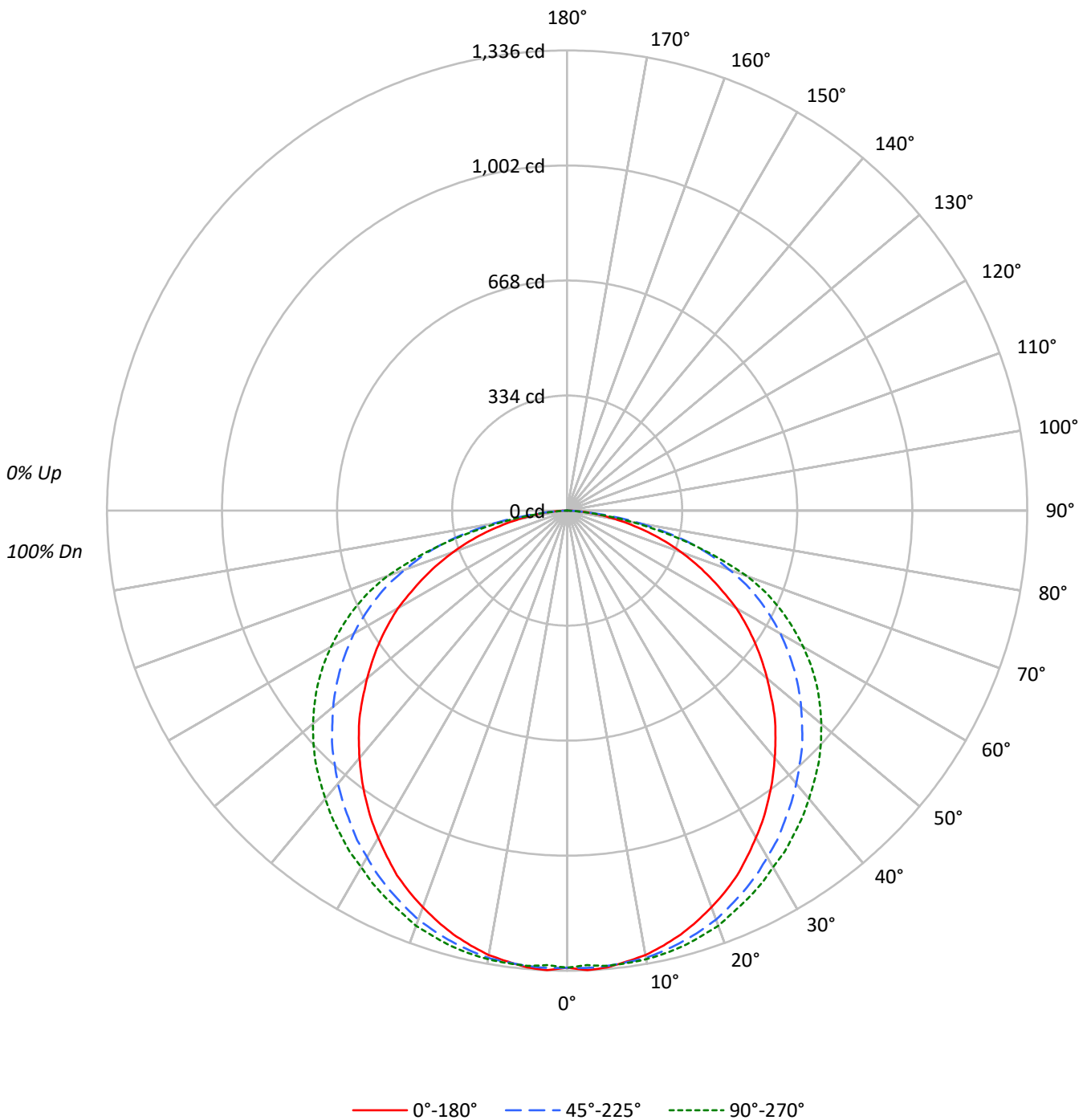
Lumens per Lamp: N/A
Luminaire Lumens: 4199.8 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.9
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



TEST NUMBER: P387563
CATALOG NUMBER: 14CZ2-48HE-SQR-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387563

CATALOG NUMBER: 14CZ2-48HE-SQR-UNV-L950-CD1-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	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73		80	76	72		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	51		60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38		50	43	38		49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34		46	39	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		41	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27		38	32	27		37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24		36	29	24		35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3571	3571	3571
5°	3596	3585	3585
10°	3580	3603	3615
15°	3550	3609	3644
20°	3510	3619	3673
25°	3469	3614	3689
30°	3407	3611	3716
35°	3352	3616	3769
40°	3294	3636	3837
45°	3246	3673	3931
50°	3172	3713	4032
55°	3118	3773	4151
60°	3053	3850	4260
65°	2911	3922	4367
70°	2765	3930	4364
75°	2531	3918	3851
80°	2165	3346	2985
85°	1698	1896	1112



TEST NUMBER: P387563

CATALOG NUMBER: 14CZ2-48HE-SQR-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.1	3.0
10°-20°	364.3	8.7
20°-30°	557.2	13.3
30°-40°	683.0	16.3
40°-50°	734.5	17.5
50°-60°	705.8	16.8
60°-70°	587.7	14.0
70°-80°	360.7	8.6
80°-90°	80.4	1.9
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°	1047.7	24.9
0°-40°	1730.6	41.2
0°-60°	3171.0	75.5
0°-90°	4199.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4199.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1327	1327	1327	1327	1327	
5°	1331	1319	1327	1327	1327	126
15°	1274	1270	1295	1304	1308	359
25°	1168	1179	1217	1232	1242	537
35°	1020	1046	1101	1130	1147	638
45°	853	891	965	1010	1033	656
55°	665	722	804	859	885	594
65°	457	527	616	667	686	453
75°	243	318	377	375	370	258
85°	55	83	61	42	36	66
90°	0	0	0	0	0	



TEST NUMBER: P387563

CATALOG NUMBER: 14CZ2-48HE-SQR-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1327.2	1327.2	1327.2	1327.2	1327.2
2.5°	1335.6	1322.9	1329.3	1327.2	1320.8
5°	1331.4	1318.7	1327.2	1327.2	1327.2
7.5°	1320.8	1310.2	1322.9	1325.1	1325.1
10°	1310.2	1301.8	1318.7	1320.8	1322.9
12.5°	1293.3	1287.0	1308.1	1312.4	1316.6
15°	1274.3	1270.0	1295.4	1303.9	1308.1
17.5°	1251.0	1253.1	1280.6	1291.2	1295.4
20°	1225.6	1231.9	1263.7	1274.3	1282.7
22.5°	1198.1	1206.5	1240.4	1253.1	1261.6
25°	1168.4	1179.0	1217.1	1231.9	1242.5
27.5°	1132.4	1149.4	1191.7	1210.8	1221.3
30°	1096.5	1115.5	1162.1	1185.4	1195.9
32.5°	1060.5	1081.6	1134.6	1157.8	1174.8
35°	1020.3	1045.7	1100.7	1130.3	1147.3
37.5°	980.0	1009.7	1068.9	1102.8	1121.9
40°	937.7	969.5	1035.1	1073.2	1092.2
42.5°	895.4	931.3	999.1	1041.4	1062.6
45°	853.0	891.1	965.2	1009.7	1033.0
47.5°	804.3	850.9	925.0	975.8	999.1
50°	757.8	808.6	886.9	939.8	963.1
52.5°	711.2	764.1	846.7	901.7	925.0
55°	664.6	721.8	804.3	859.4	884.8
57.5°	616.0	675.2	759.9	817.0	840.3
60°	567.3	628.7	715.4	768.4	791.6
62.5°	510.1	582.1	666.8	719.7	740.8
65°	457.2	527.1	616.0	666.8	685.8
67.5°	404.3	476.3	563.0	609.6	626.5
70°	351.4	423.3	499.5	544.0	554.6
72.5°	298.5	370.4	442.4	467.8	463.6
75°	243.4	317.5	376.8	374.7	370.4
77.5°	190.5	262.5	298.5	283.6	277.3
80°	139.7	209.6	215.9	201.1	192.6
82.5°	95.3	150.3	135.5	118.5	110.1
85°	55.0	82.6	61.4	42.3	36.0
87.5°	23.3	21.2	6.4	6.4	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)