

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: P388497

Luminaire Tested: **24CZ2-30HE-SQR-UNV-L950-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: P388497
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30HE-SQR-UNV-L950-CD1-SDWPD1-U
Description: 2x4 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: 2560.7 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

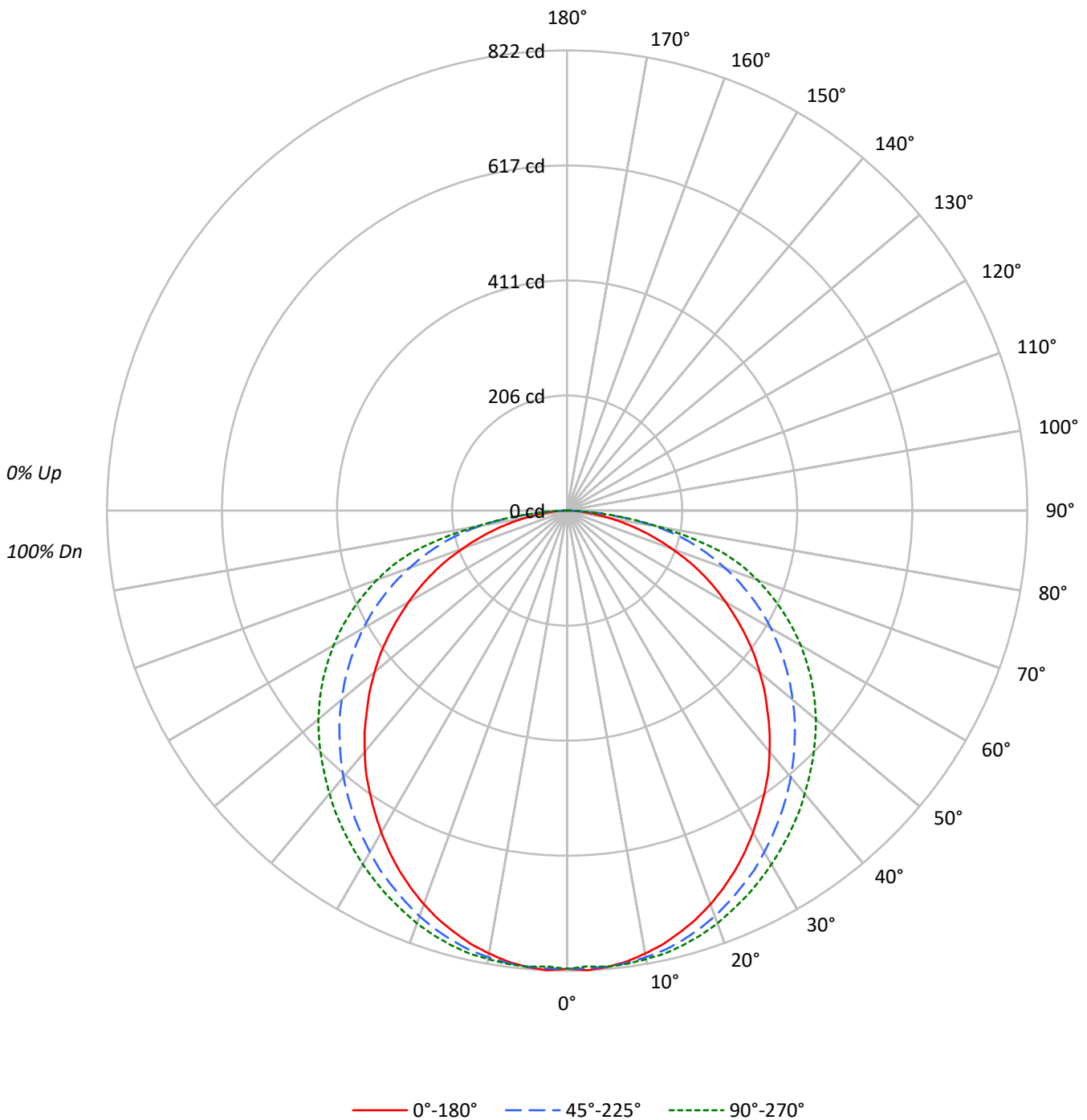
Input Watts (W): 22.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	89	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	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°	1101	1101	1101
5°	1105	1104	1104
10°	1098	1107	1111
15°	1086	1107	1119
20°	1071	1104	1124
25°	1053	1098	1127
30°	1031	1094	1134
35°	1010	1092	1145
40°	988	1092	1160
45°	962	1094	1183
50°	940	1101	1214
55°	913	1113	1252
60°	880	1131	1297
65°	843	1152	1351
70°	782	1181	1421
75°	708	1222	1486
80°	596	1225	1278
85°	457	926	926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.7	3.0
10°-20°	223.5	8.7
20°-30°	339.5	13.3
30°-40°	413.0	16.1
40°-50°	439.7	17.2
50°-60°	418.8	16.4
60°-70°	350.3	13.7
70°-80°	233.5	9.1
80°-90°	64.6	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°	640.8	25.0
0°-40°	1053.8	41.2
0°-60°	1912.3	74.7
0°-90°	2560.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2560.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	818	814	818	818	818	78
15°	780	781	795	801	803	220
25°	709	719	740	753	759	327
35°	615	632	665	687	697	385
45°	506	533	575	607	622	391
55°	389	423	474	516	534	348
65°	265	304	362	407	424	261
75°	136	179	235	275	286	144
85°	30	55	60	59	60	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.5	818.5	818.5	818.5	818.5
2.5°	821.9	816.0	818.5	818.5	815.1
5°	818.5	813.5	817.7	817.7	817.7
7.5°	812.6	808.4	815.1	816.8	816.8
10°	803.3	801.6	810.1	812.6	813.5
12.5°	793.2	792.3	804.1	807.5	810.1
15°	779.6	781.3	794.8	800.8	803.3
17.5°	765.3	768.6	783.9	792.3	794.8
20°	748.3	753.4	771.2	779.6	784.7
22.5°	729.7	737.3	756.0	766.1	772.0
25°	709.4	718.7	739.9	752.6	759.3
27.5°	687.5	699.3	723.8	738.2	745.0
30°	663.8	677.3	704.4	721.3	729.7
32.5°	639.3	655.3	684.9	703.5	713.7
35°	614.7	632.5	664.6	686.6	696.8
37.5°	590.2	608.0	643.5	667.2	679.8
40°	562.3	583.5	621.5	647.7	660.4
42.5°	535.3	558.1	598.7	627.4	641.0
45°	505.7	532.7	575.0	607.1	621.5
47.5°	478.6	505.7	551.3	585.1	601.2
50°	449.0	477.8	526.0	563.2	580.1
52.5°	420.3	449.9	500.6	540.3	557.2
55°	389.0	422.8	474.4	515.8	533.6
57.5°	357.7	394.0	447.3	490.4	508.2
60°	327.2	364.4	420.3	463.4	482.0
62.5°	296.8	334.0	392.4	436.3	454.1
65°	264.7	303.6	361.9	406.7	424.5
67.5°	232.5	273.1	331.5	376.3	393.2
70°	198.7	241.8	300.2	344.2	361.1
72.5°	167.4	210.6	268.0	311.2	327.2
75°	136.1	179.3	235.1	274.8	285.8
77.5°	105.7	148.8	198.7	224.9	227.5
80°	76.9	117.5	158.1	165.7	164.9
82.5°	51.6	87.9	109.1	109.9	112.5
85°	29.6	55.0	60.0	59.2	60.0
87.5°	11.8	19.4	16.9	12.7	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)