

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: P387772

Luminaire Tested: **22CZ2-24VHE-SQR-UNV-L935-CD1-SWPD1-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: P387772
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: 22CZ2-24VHE-SQR-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2005.6 lumens
Efficiency: N/A
Efficacy: 114.6 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

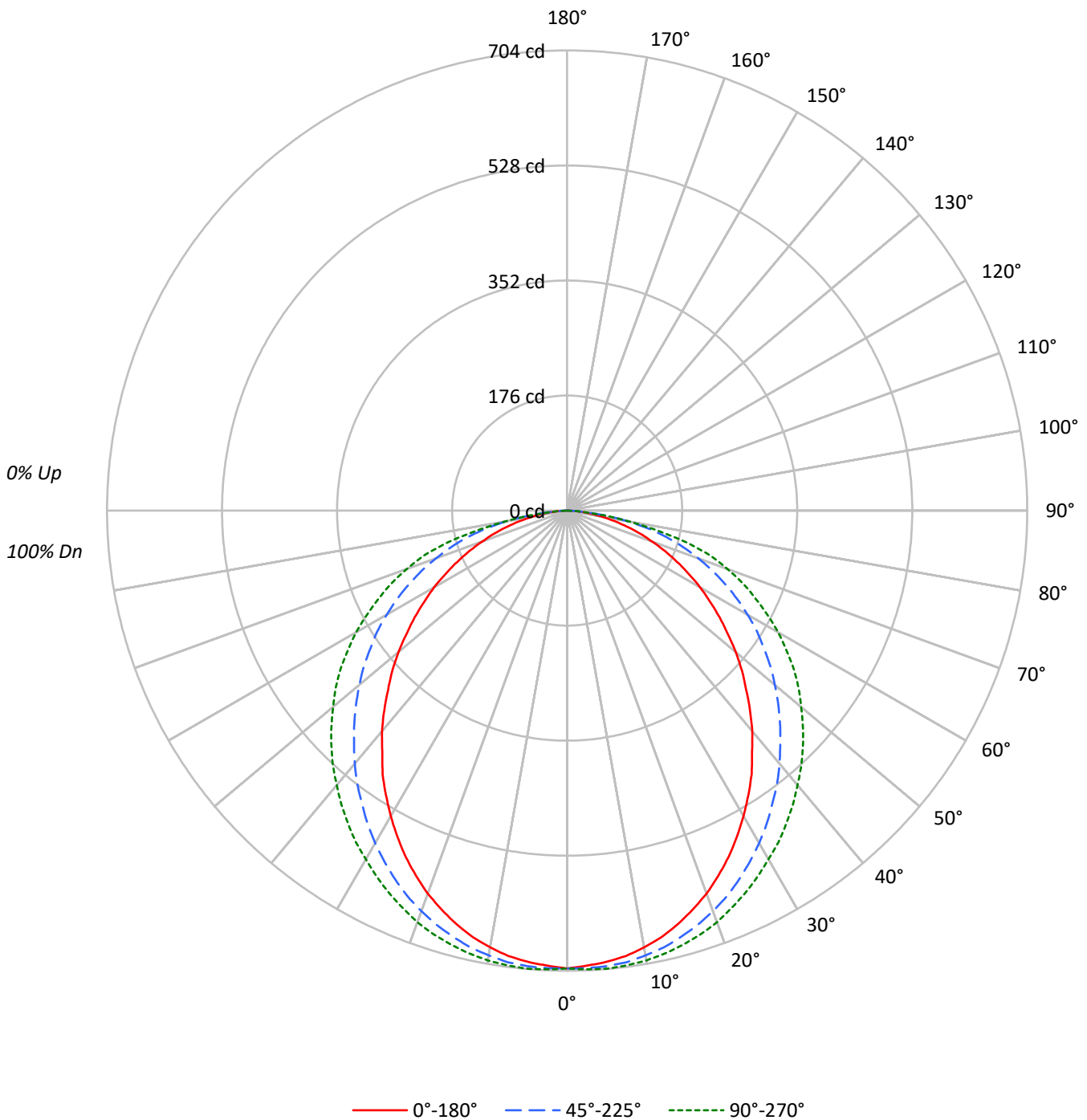
Input Watts (W): 17.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1885	1885	1885
5°	1872	1890	1900
10°	1855	1888	1909
15°	1824	1880	1915
20°	1786	1867	1919
25°	1735	1848	1916
30°	1677	1825	1914
35°	1617	1798	1920
40°	1548	1776	1926
45°	1474	1753	1942
50°	1411	1737	1957
55°	1335	1724	1987
60°	1265	1716	2008
65°	1182	1703	2024
70°	1086	1677	2052
75°	979	1633	1980
80°	841	1446	1489
85°	676	852	676



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	3.3
10°-20°	189.9	9.5
20°-30°	285.2	14.2
30°-40°	340.2	17.0
40°-50°	351.7	17.5
50°-60°	323.3	16.1
60°-70°	257.4	12.8
70°-80°	157.3	7.8
80°-90°	34.2	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°	541.5	27.0
0°-40°	881.7	44.0
0°-60°	1556.7	77.6
0°-90°	2005.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2005.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	693	695	700	702	704	66
15°	655	662	675	684	687	184
25°	584	599	622	640	645	269
35°	492	513	547	576	584	307
45°	387	415	461	498	510	300
55°	285	316	367	409	424	255
65°	186	217	268	305	318	184
75°	94	122	157	185	190	100
85°	22	27	28	24	22	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	700.6	700.6	700.6	700.6	700.6
2.5°	696.8	697.7	700.6	702.5	702.5
5°	693.0	694.9	699.7	702.5	703.5
7.5°	687.3	690.1	696.8	700.6	701.6
10°	678.7	682.5	691.1	696.8	698.7
12.5°	668.2	674.0	684.4	692.0	693.9
15°	654.9	662.5	674.9	684.4	687.3
17.5°	639.7	649.2	664.4	675.9	679.7
20°	623.5	633.0	652.1	665.4	670.1
22.5°	604.5	616.8	638.7	654.0	657.8
25°	584.5	598.8	622.5	639.7	645.4
27.5°	562.6	579.7	605.4	626.4	631.1
30°	539.7	557.8	587.3	610.2	615.9
32.5°	515.9	536.9	568.3	594.0	601.6
35°	492.1	513.1	547.3	575.9	584.5
37.5°	464.5	489.3	527.4	556.9	567.3
40°	440.7	464.5	505.5	537.8	548.3
42.5°	414.1	439.8	482.6	517.8	530.2
45°	387.4	415.0	460.7	497.8	510.2
47.5°	362.7	390.3	437.9	476.9	489.3
50°	337.0	365.5	415.0	455.0	467.4
52.5°	309.4	340.8	392.2	432.2	446.4
55°	284.6	316.0	367.4	409.3	423.6
57.5°	258.9	291.3	344.6	384.6	397.9
60°	235.1	266.5	318.9	357.9	373.1
62.5°	209.4	241.8	293.2	331.3	345.5
65°	185.6	217.0	267.5	304.6	317.9
67.5°	161.8	193.2	240.8	276.1	291.3
70°	138.0	169.4	213.2	247.5	260.8
72.5°	117.1	144.7	186.6	218.0	230.4
75°	94.2	121.8	157.1	184.7	190.4
77.5°	73.3	98.0	127.6	139.9	141.8
80°	54.3	73.3	93.3	96.1	96.1
82.5°	36.2	50.5	58.1	59.0	58.1
85°	21.9	26.7	27.6	23.8	21.9
87.5°	7.6	7.6	4.8	2.9	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)