

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: P387673

Luminaire Tested: **22CZ2-20HE-SQR-UNV-L930-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: P387673
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: 22CZ2-20HE-SQR-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1599.5 lumens
Efficiency: N/A
Efficacy: 100.0 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

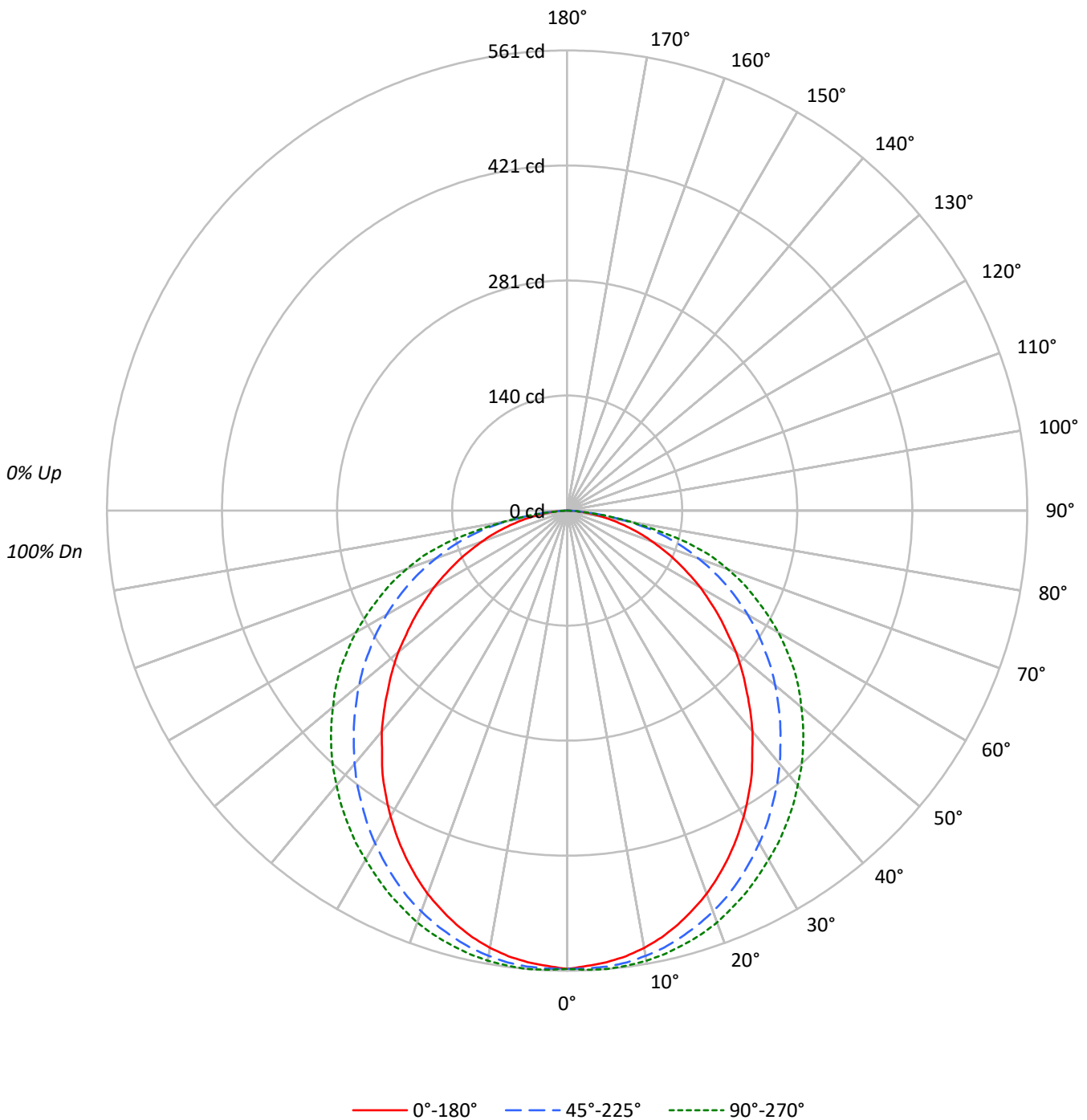
Input Watts (W): 16
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1503	1503	1503
5°	1493	1507	1515
10°	1479	1506	1523
15°	1455	1499	1527
20°	1424	1489	1531
25°	1384	1474	1528
30°	1337	1455	1526
35°	1289	1434	1531
40°	1235	1416	1536
45°	1176	1398	1549
50°	1125	1386	1560
55°	1065	1375	1585
60°	1009	1369	1602
65°	942	1358	1615
70°	866	1338	1637
75°	782	1303	1578
80°	671	1153	1189
85°	540	679	540



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.0	3.3
10°-20°	151.4	9.5
20°-30°	227.5	14.2
30°-40°	271.3	17.0
40°-50°	280.5	17.5
50°-60°	257.9	16.1
60°-70°	205.3	12.8
70°-80°	125.4	7.8
80°-90°	27.3	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°	431.9	27.0
0°-40°	703.2	44.0
0°-60°	1241.5	77.6
0°-90°	1599.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1599.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	559	559	559	559	559	
5°	553	554	558	560	561	52
15°	522	528	538	546	548	147
25°	466	478	496	510	515	214
35°	392	409	436	459	466	245
45°	309	331	367	397	407	239
55°	227	252	293	326	338	203
65°	148	173	213	243	254	147
75°	75	97	125	147	152	80
85°	18	21	22	19	18	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	558.7	558.7	558.7	558.7	558.7
2.5°	555.7	556.5	558.7	560.3	560.3
5°	552.7	554.2	558.0	560.3	561.0
7.5°	548.1	550.4	555.7	558.7	559.5
10°	541.3	544.3	551.2	555.7	557.2
12.5°	532.9	537.5	545.8	551.9	553.4
15°	522.3	528.4	538.2	545.8	548.1
17.5°	510.2	517.7	529.9	539.0	542.0
20°	497.3	504.8	520.0	530.7	534.5
22.5°	482.1	491.9	509.4	521.5	524.6
25°	466.1	477.5	496.5	510.2	514.7
27.5°	448.7	462.3	482.8	499.5	503.3
30°	430.4	444.9	468.4	486.6	491.2
32.5°	411.5	428.2	453.2	473.7	479.8
35°	392.5	409.2	436.5	459.3	466.1
37.5°	370.5	390.2	420.6	444.1	452.5
40°	351.5	370.5	403.1	428.9	437.3
42.5°	330.2	350.7	384.9	413.0	422.9
45°	309.0	331.0	367.4	397.0	406.9
47.5°	289.2	311.3	349.2	380.3	390.2
50°	268.7	291.5	331.0	362.9	372.7
52.5°	246.7	271.8	312.8	344.7	356.0
55°	227.0	252.0	293.0	326.4	337.8
57.5°	206.5	232.3	274.8	306.7	317.3
60°	187.5	212.6	254.3	285.4	297.6
62.5°	167.0	192.8	233.8	264.2	275.6
65°	148.0	173.1	213.3	242.9	253.6
67.5°	129.1	154.1	192.1	220.2	232.3
70°	110.1	135.1	170.1	197.4	208.0
72.5°	93.4	115.4	148.8	173.8	183.7
75°	75.2	97.2	125.3	147.3	151.8
77.5°	58.5	78.2	101.7	111.6	113.1
80°	43.3	58.5	74.4	76.7	76.7
82.5°	28.8	40.2	46.3	47.1	46.3
85°	17.5	21.3	22.0	19.0	17.5
87.5°	6.1	6.1	3.8	2.3	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)