

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: P390767

Luminaire Tested: **22CZ2-85VHE-RDP-UNV-L930-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: P390767
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-85VHE-RDP-UNV-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4780.6 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

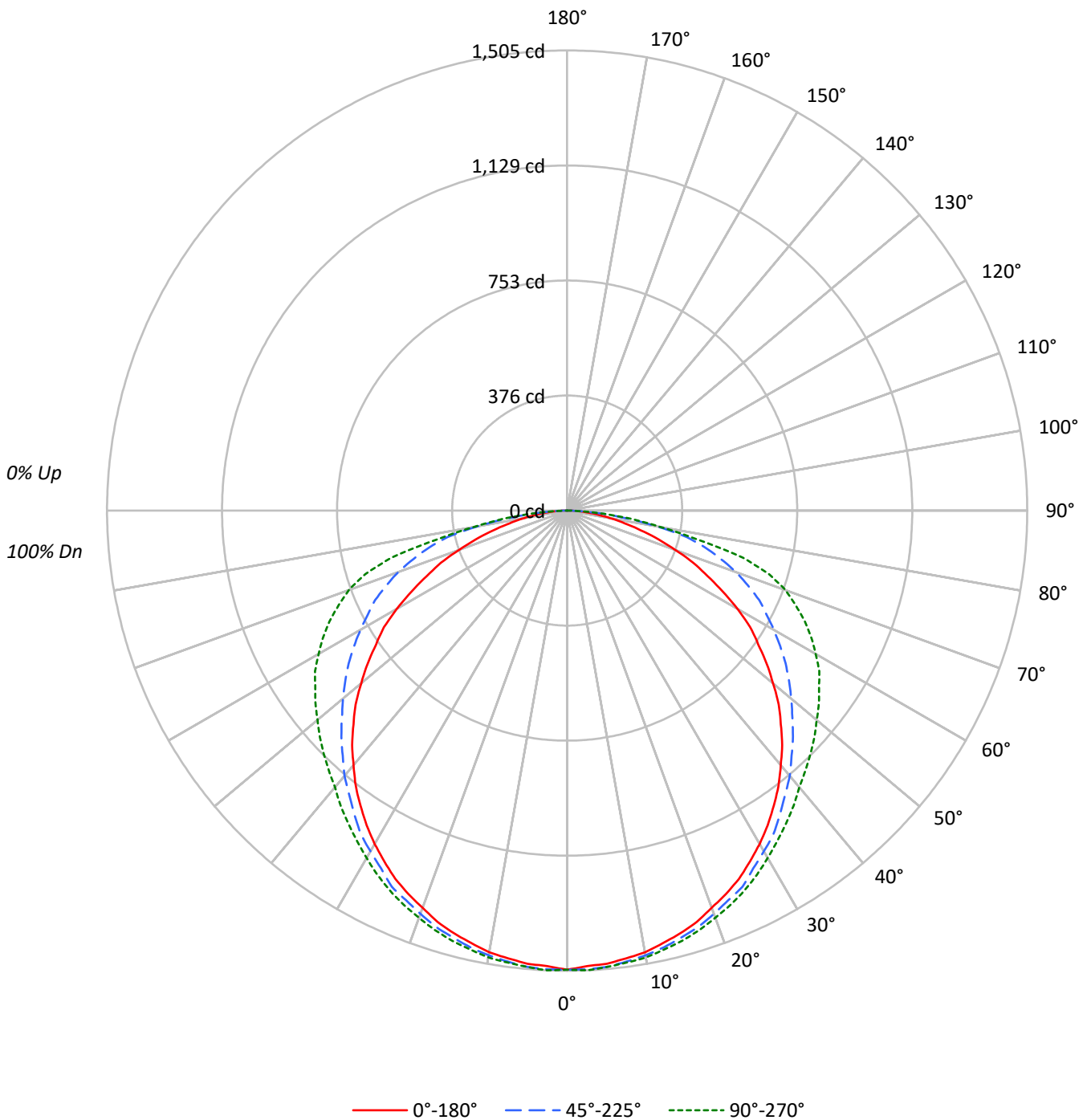
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	89		92	89	86		88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72		80	75	71		76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60		70	64	59		67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50		61	55	50		59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33		45	38	33		44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29		41	34	29		40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4041	4041	4041
5°	4018	4047	4047
10°	4007	4036	4055
15°	3987	4027	4056
20°	3958	4018	4059
25°	3947	4031	4072
30°	3912	3999	4076
35°	3870	3986	4101
40°	3817	3978	4151
45°	3761	3975	4283
50°	3681	4005	4461
55°	3580	4092	4719
60°	3464	4202	5054
65°	3224	4411	5464
70°	2961	4621	5976
75°	2596	4863	6179
80°	2235	4632	4850
85°	1954	3365	3693



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.0	3.0
10°-20°	407.8	8.5
20°-30°	622.2	13.0
30°-40°	759.8	15.9
40°-50°	812.4	17.0
50°-60°	784.1	16.4
60°-70°	675.0	14.1
70°-80°	456.7	9.6
80°-90°	120.5	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°	1172.1	24.5
0°-40°	1931.9	40.4
0°-60°	3528.4	73.8
0°-90°	4780.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4780.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1502	1502	1502	1502	1502	
5°	1488	1491	1498	1498	1498	141
15°	1431	1435	1445	1452	1456	404
25°	1329	1336	1358	1364	1372	612
35°	1178	1189	1213	1238	1248	737
45°	988	1006	1044	1097	1125	763
55°	763	788	872	960	1006	684
65°	506	556	693	802	858	504
75°	250	331	468	563	594	268
85°	63	88	109	112	120	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1501.7	1501.7	1501.7	1501.7	1501.7
2.5°	1491.1	1494.6	1501.7	1501.7	1505.2
5°	1487.6	1491.1	1498.2	1498.2	1498.2
7.5°	1477.1	1480.6	1487.6	1491.1	1491.1
10°	1466.5	1470.0	1477.1	1480.6	1484.1
12.5°	1448.9	1452.4	1463.0	1470.0	1470.0
15°	1431.3	1434.9	1445.4	1452.4	1456.0
17.5°	1410.2	1417.3	1427.8	1434.9	1438.4
20°	1382.1	1389.1	1403.2	1413.7	1417.3
22.5°	1357.5	1364.5	1378.6	1389.1	1396.2
25°	1329.3	1336.4	1357.5	1364.5	1371.5
27.5°	1294.2	1301.2	1318.8	1332.9	1343.4
30°	1259.0	1266.0	1287.1	1304.7	1311.8
32.5°	1220.3	1230.9	1255.5	1269.6	1280.1
35°	1178.1	1188.7	1213.3	1237.9	1248.5
37.5°	1135.9	1146.5	1171.1	1202.7	1216.8
40°	1086.7	1100.8	1132.4	1174.6	1181.6
42.5°	1041.0	1058.6	1086.7	1135.9	1153.5
45°	988.2	1005.8	1044.5	1097.2	1125.4
47.5°	939.0	956.6	998.8	1062.1	1097.2
50°	879.2	903.8	956.6	1030.4	1065.6
52.5°	822.9	844.0	914.4	995.3	1037.5
55°	763.1	787.8	872.2	960.1	1005.8
57.5°	710.4	731.5	826.4	924.9	977.7
60°	643.6	671.7	780.7	886.2	939.0
62.5°	573.2	615.4	735.0	844.0	900.3
65°	506.4	555.7	692.8	801.8	858.1
67.5°	446.6	499.4	640.1	756.1	808.9
70°	376.3	443.1	587.3	699.8	759.6
72.5°	313.0	386.8	527.5	640.1	692.8
75°	249.7	330.6	467.7	562.7	594.3
77.5°	193.4	270.8	400.9	429.0	432.6
80°	144.2	214.5	298.9	302.4	313.0
82.5°	98.5	151.2	193.4	211.0	214.5
85°	63.3	87.9	109.0	112.5	119.6
87.5°	28.1	31.7	38.7	35.2	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)