

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: P390245

Luminaire Tested: **22CZ2-29VHE-RDP-UNV-L940-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: P390245
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: 22CZ2-29VHE-RDP-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1789.1 lumens
Efficiency: N/A
Efficacy: 82.4 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

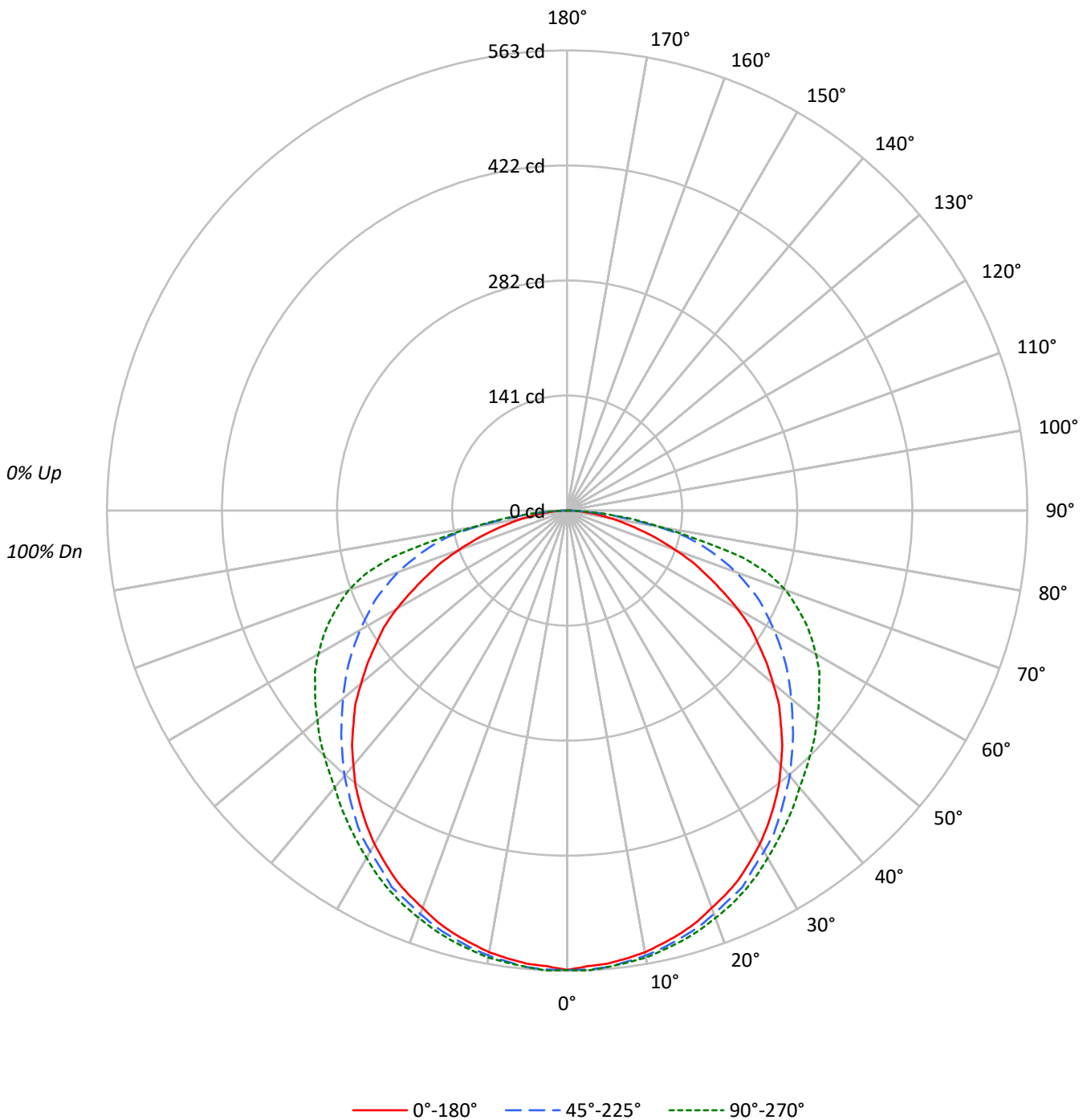
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1512	1512	1512
5°	1504	1515	1515
10°	1500	1511	1518
15°	1492	1507	1518
20°	1481	1504	1519
25°	1477	1508	1524
30°	1464	1497	1525
35°	1448	1492	1535
40°	1429	1489	1553
45°	1407	1488	1603
50°	1377	1499	1670
55°	1340	1531	1766
60°	1297	1573	1891
65°	1207	1651	2045
70°	1108	1729	2237
75°	971	1820	2312
80°	837	1734	1815
85°	732	1260	1380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	3.0
10°-20°	152.6	8.5
20°-30°	232.9	13.0
30°-40°	284.3	15.9
40°-50°	304.0	17.0
50°-60°	293.5	16.4
60°-70°	252.6	14.1
70°-80°	170.9	9.6
80°-90°	45.1	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°	438.7	24.5
0°-40°	723.0	40.4
0°-60°	1320.5	73.8
0°-90°	1789.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1789.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	562	562	562	562	562	
5°	557	558	561	561	561	53
15°	536	537	541	544	545	151
25°	498	500	508	511	513	229
35°	441	445	454	463	467	276
45°	370	376	391	411	421	285
55°	286	295	326	359	376	256
65°	190	208	259	300	321	188
75°	93	124	175	211	222	100
85°	24	33	41	42	45	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	562.0	562.0	562.0	562.0	562.0
2.5°	558.0	559.4	562.0	562.0	563.3
5°	556.7	558.0	560.7	560.7	560.7
7.5°	552.8	554.1	556.7	558.0	558.0
10°	548.8	550.1	552.8	554.1	555.4
12.5°	542.2	543.6	547.5	550.1	550.1
15°	535.7	537.0	540.9	543.6	544.9
17.5°	527.8	530.4	534.3	537.0	538.3
20°	517.2	519.9	525.1	529.1	530.4
22.5°	508.0	510.7	515.9	519.9	522.5
25°	497.5	500.1	508.0	510.7	513.3
27.5°	484.3	487.0	493.5	498.8	502.8
30°	471.2	473.8	481.7	488.3	490.9
32.5°	456.7	460.6	469.9	475.1	479.1
35°	440.9	444.9	454.1	463.3	467.2
37.5°	425.1	429.1	438.3	450.1	455.4
40°	406.7	411.9	423.8	439.6	442.2
42.5°	389.6	396.2	406.7	425.1	431.7
45°	369.8	376.4	390.9	410.6	421.2
47.5°	351.4	358.0	373.8	397.5	410.6
50°	329.0	338.2	358.0	385.6	398.8
52.5°	308.0	315.9	342.2	372.5	388.3
55°	285.6	294.8	326.4	359.3	376.4
57.5°	265.9	273.8	309.3	346.1	365.9
60°	240.9	251.4	292.2	331.7	351.4
62.5°	214.5	230.3	275.1	315.9	336.9
65°	189.5	207.9	259.3	300.1	321.1
67.5°	167.1	186.9	239.5	283.0	302.7
70°	140.8	165.8	219.8	261.9	284.3
72.5°	117.1	144.8	197.4	239.5	259.3
75°	93.4	123.7	175.0	210.6	222.4
77.5°	72.4	101.3	150.0	160.6	161.9
80°	54.0	80.3	111.9	113.2	117.1
82.5°	36.9	56.6	72.4	79.0	80.3
85°	23.7	32.9	40.8	42.1	44.7
87.5°	10.5	11.8	14.5	13.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)