

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: P388587

Luminaire Tested: **24CZ2-35VHE-SQR-UNV-L935-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: P388587
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: 24CZ2-35VHE-SQR-UNV-L935-CD1-SDWPD1-U
Description: 2x4 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: 2793.4 lumens
Efficiency: N/A
Efficacy: 122.5 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

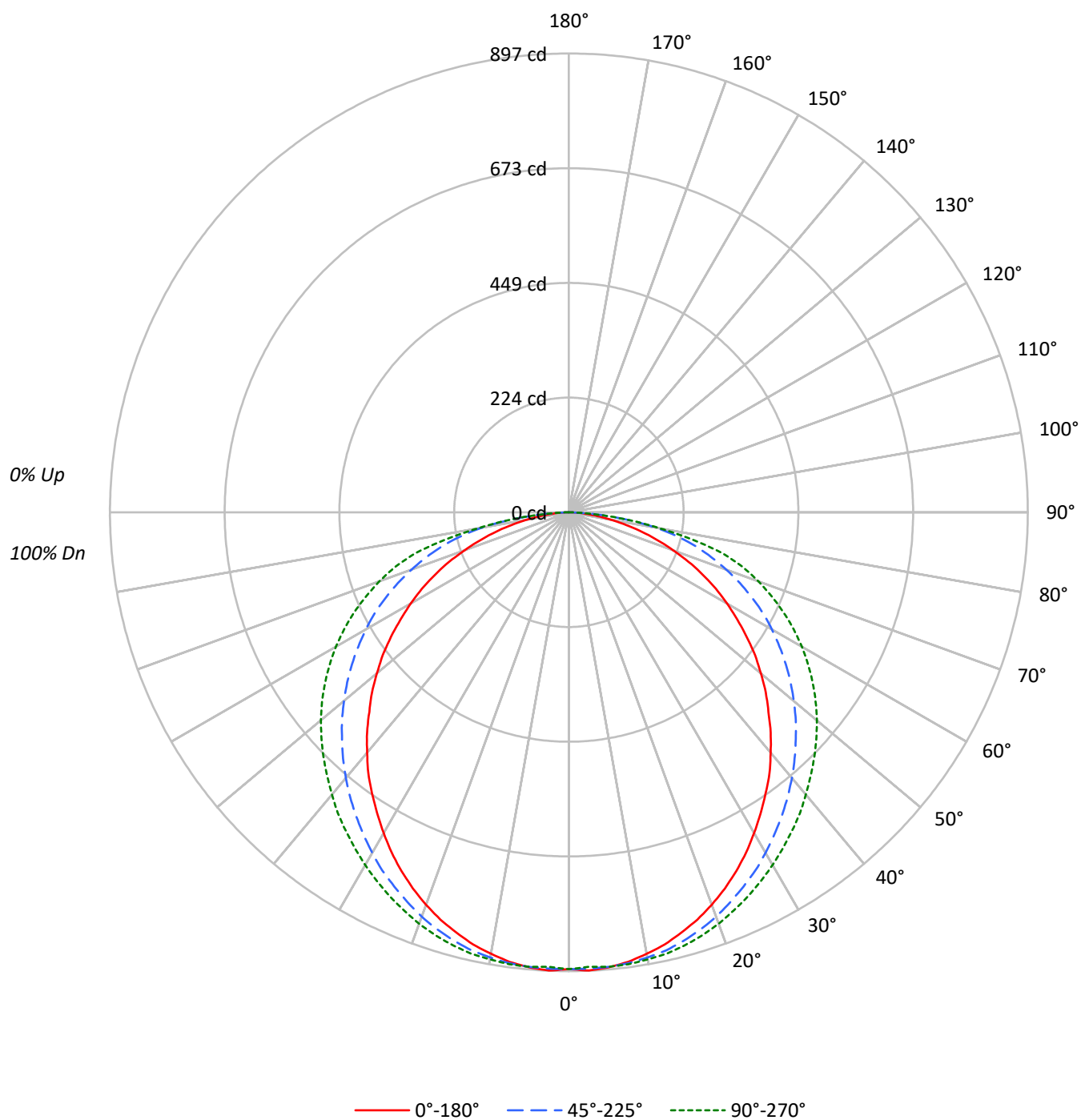
Input Watts (W): 22.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1201	1201	1201
5°	1206	1205	1205
10°	1197	1207	1212
15°	1185	1208	1221
20°	1169	1205	1226
25°	1149	1198	1230
30°	1125	1194	1237
35°	1101	1191	1248
40°	1077	1191	1265
45°	1050	1193	1290
50°	1025	1201	1325
55°	995	1214	1365
60°	961	1234	1415
65°	919	1257	1474
70°	853	1288	1550
75°	772	1333	1621
80°	650	1337	1394
85°	499	1011	1011



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.8	3.0
10°-20°	243.9	8.7
20°-30°	370.4	13.3
30°-40°	450.5	16.1
40°-50°	479.7	17.2
50°-60°	456.9	16.4
60°-70°	382.1	13.7
70°-80°	254.7	9.1
80°-90°	70.5	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°	699.0	25.0
0°-40°	1149.6	41.2
0°-60°	2086.1	74.7
0°-90°	2793.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2793.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	893	893	893	893	893	
5°	893	887	892	892	892	85
15°	850	852	867	874	876	240
25°	774	784	807	821	828	356
35°	671	690	725	749	760	420
45°	552	581	627	662	678	426
55°	424	461	518	563	582	379
65°	289	331	395	444	463	285
75°	148	196	256	300	312	157
85°	32	60	66	65	66	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	892.9	892.9	892.9	892.9	892.9
2.5°	896.6	890.1	892.9	892.9	889.2
5°	892.9	887.4	892.0	892.0	892.0
7.5°	886.4	881.8	889.2	891.1	891.1
10°	876.3	874.5	883.7	886.4	887.4
12.5°	865.2	864.3	877.2	880.9	883.7
15°	850.5	852.3	867.1	873.5	876.3
17.5°	834.8	838.5	855.1	864.3	867.1
20°	816.3	821.9	841.3	850.5	856.0
22.5°	796.1	804.4	824.6	835.7	842.2
25°	773.9	784.1	807.1	821.0	828.3
27.5°	749.9	762.8	789.6	805.3	812.7
30°	724.1	738.9	768.4	786.8	796.1
32.5°	697.4	714.9	747.2	767.5	778.5
35°	670.6	690.0	725.0	749.0	760.1
37.5°	643.9	663.2	702.0	727.8	741.6
40°	613.4	636.5	678.0	706.6	720.4
42.5°	583.9	608.8	653.1	684.4	699.2
45°	551.6	581.1	627.2	662.3	678.0
47.5°	522.1	551.6	601.4	638.3	655.8
50°	489.8	521.2	573.7	614.3	632.8
52.5°	458.4	490.7	546.1	589.4	607.9
55°	424.3	461.2	517.5	562.7	582.0
57.5°	390.2	429.8	488.0	535.0	554.4
60°	357.0	397.6	458.4	505.5	525.8
62.5°	323.8	364.4	428.0	476.0	495.3
65°	288.7	331.2	394.8	443.7	463.1
67.5°	253.7	297.9	361.6	410.5	428.9
70°	216.8	263.8	327.5	375.4	393.9
72.5°	182.6	229.7	292.4	339.5	357.0
75°	148.5	195.6	256.4	299.8	311.8
77.5°	115.3	162.3	216.8	245.4	248.1
80°	83.9	128.2	172.5	180.8	179.9
82.5°	56.3	95.9	119.0	119.9	122.7
85°	32.3	60.0	65.5	64.6	65.5
87.5°	12.9	21.2	18.4	13.8	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)