

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: P474633

Luminaire Tested: **24CZ2-35VHE-SQR-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474633
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35VHE-SQR-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3365.1 lumens
Efficiency: N/A
Efficacy: 140.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

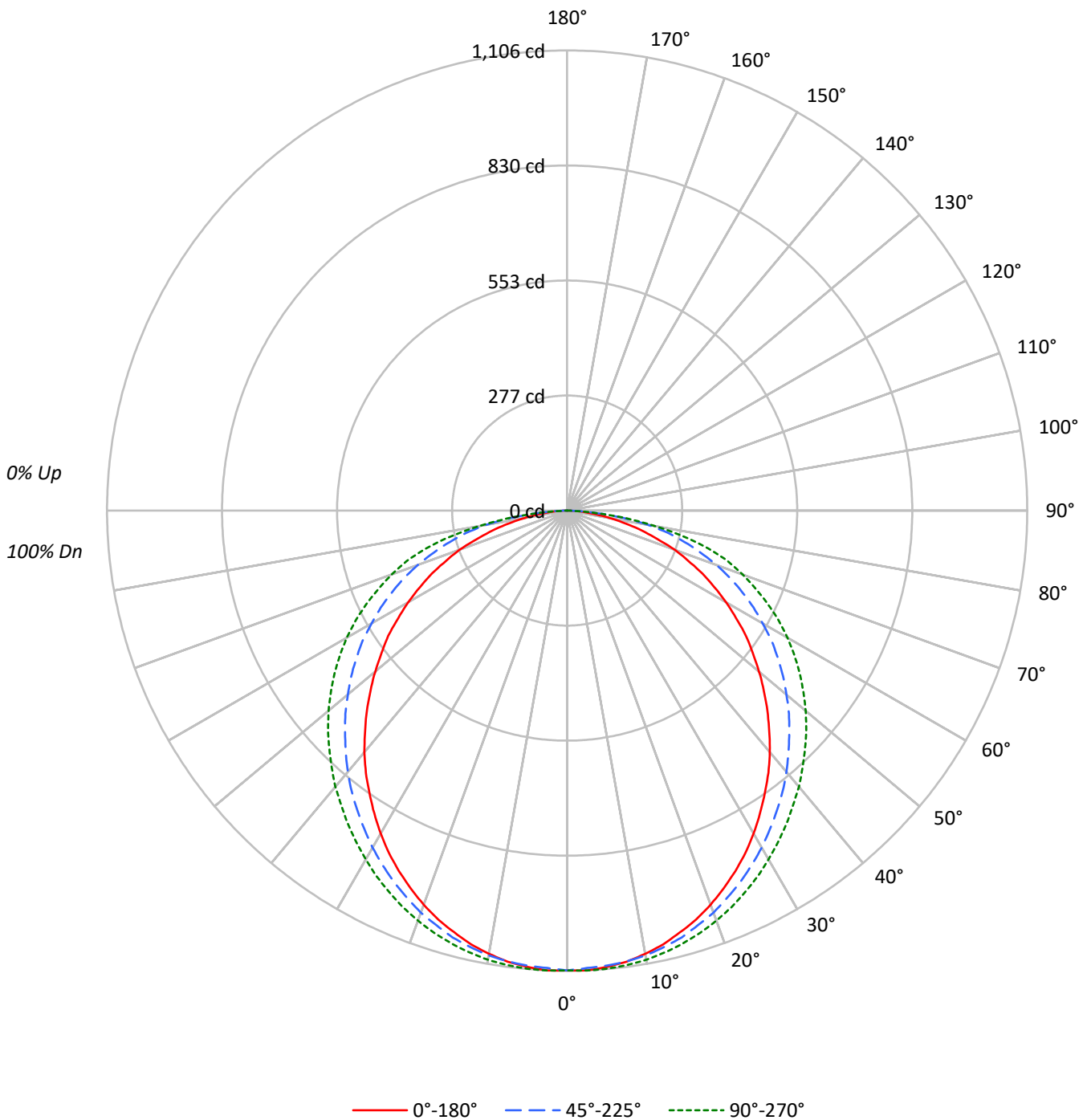
Input Watts (W): 23.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2974	2974	2974
5°	2974	2965	2986
10°	2956	2966	2995
15°	2924	2959	3000
20°	2887	2945	3004
25°	2840	2924	3004
30°	2785	2907	3008
35°	2722	2889	3020
40°	2663	2880	3044
45°	2590	2872	3077
50°	2521	2881	3133
55°	2462	2901	3203
60°	2378	2922	3293
65°	2283	2958	3393
70°	2166	2999	3528
75°	1940	3041	3644
80°	1633	3050	3307
85°	1210	2306	2174



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.7	3.1
10°-20°	300.2	8.9
20°-30°	454.4	13.5
30°-40°	549.7	16.3
40°-50°	580.3	17.2
50°-60°	547.2	16.3
60°-70°	451.2	13.4
70°-80°	296.0	8.8
80°-90°	81.4	2.4
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°	859.4	25.5
0°-40°	1409.1	41.9
0°-60°	2536.6	75.4
0°-90°	3365.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3365.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1101	1101	1098	1105	1105	105
15°	1049	1055	1062	1075	1077	296
25°	956	968	985	1005	1012	440
35°	828	850	880	910	919	519
45°	681	711	755	795	809	525
55°	525	562	618	664	683	467
65°	359	402	464	514	533	354
75°	187	234	292	339	350	197
85°	39	68	75	73	70	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1105.3	1105.3	1105.3	1105.3	1105.3
2.5°	1106.4	1105.3	1100.5	1106.9	1106.4
5°	1101.0	1101.0	1097.8	1105.3	1105.3
7.5°	1093.5	1094.0	1093.0	1101.6	1101.6
10°	1081.7	1083.8	1085.4	1095.1	1096.2
12.5°	1067.7	1071.5	1074.7	1086.5	1087.6
15°	1049.4	1055.3	1062.3	1074.7	1076.8
17.5°	1030.6	1037.6	1045.1	1061.2	1063.9
20°	1008.0	1016.1	1028.4	1044.6	1048.9
22.5°	982.8	994.0	1006.9	1026.3	1031.7
25°	956.4	968.2	984.9	1005.3	1011.8
27.5°	927.9	941.9	960.7	984.4	991.4
30°	896.2	912.3	935.4	960.7	968.2
32.5°	862.9	881.7	907.5	935.4	944.0
35°	828.5	850.0	879.5	909.6	919.3
37.5°	794.6	816.1	851.0	882.8	891.9
40°	758.0	781.7	819.9	853.7	866.6
42.5°	719.3	747.3	787.6	825.2	837.6
45°	680.6	711.3	754.8	795.1	808.6
47.5°	641.4	675.2	723.1	763.9	779.5
50°	602.1	638.1	688.1	732.2	748.4
52.5°	562.3	600.0	654.3	701.0	715.6
55°	524.7	561.8	618.3	664.5	682.8
57.5°	481.2	523.1	582.8	629.5	647.3
60°	441.9	482.8	543.0	592.4	611.8
62.5°	399.4	441.4	504.8	554.3	573.1
65°	358.6	401.6	464.5	514.0	532.8
67.5°	314.5	359.7	424.2	472.0	490.3
70°	275.3	317.7	381.2	430.1	448.4
72.5°	227.4	275.8	336.5	384.9	404.8
75°	186.6	234.4	292.5	338.7	350.5
77.5°	143.5	191.4	248.9	279.0	287.1
80°	105.4	150.5	196.8	212.9	213.4
82.5°	71.0	110.7	137.1	145.2	144.1
85°	39.2	67.7	74.7	72.6	70.4
87.5°	16.1	22.6	18.3	12.9	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)