

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: P475496

Luminaire Tested: **14CZ2-29-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475496
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-29-SQR-UNV-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

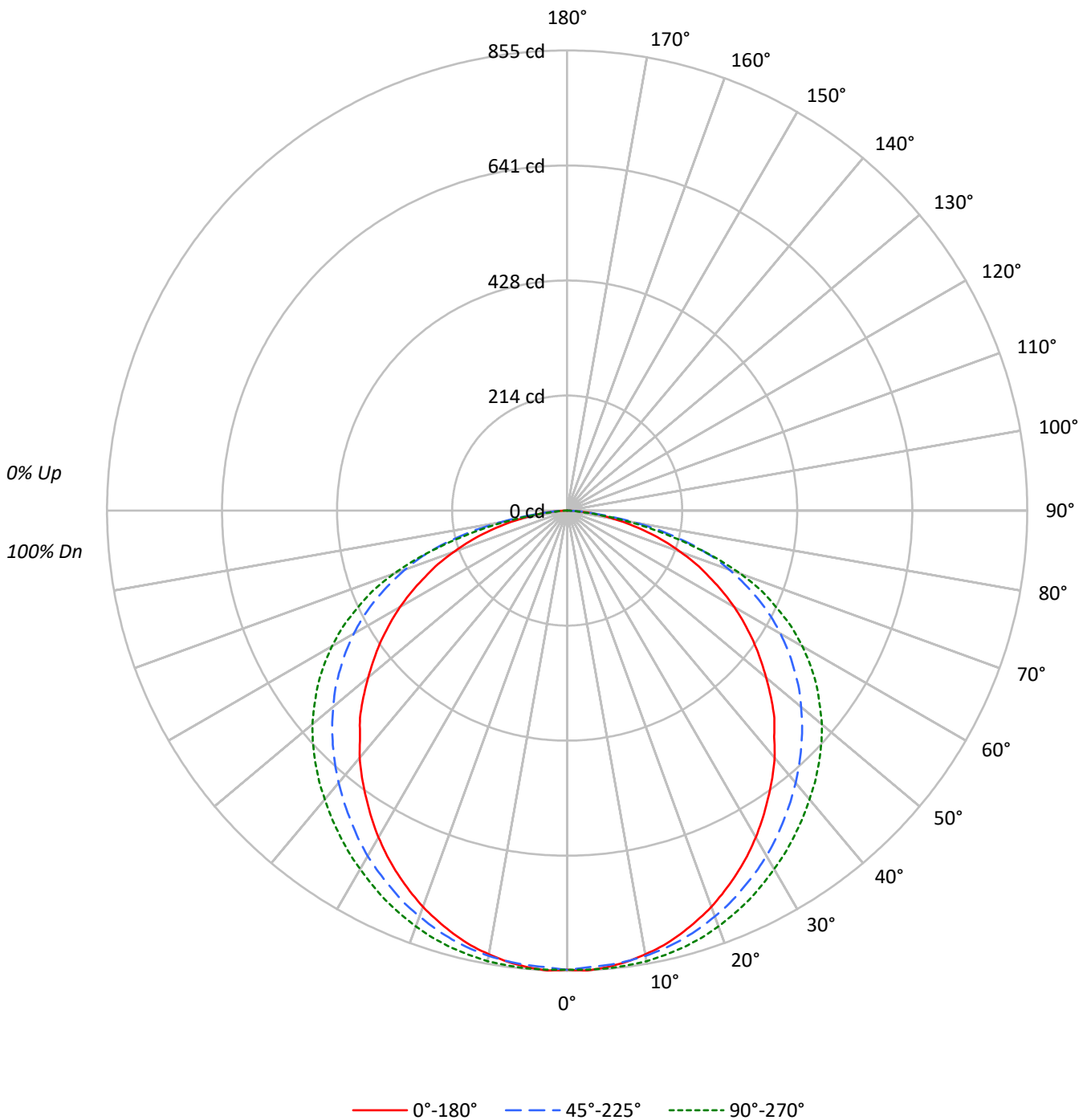
Lumens per Lamp: N/A
Luminaire Lumens: 2678.7 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.34 / 1.43
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 21.4
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	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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	74	81	76	72	77	74	70	68
3	89	78	69	63	86	76	68	62	73	67	61	70	65	60	68	63	59	57
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	43	38	36
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2296	2296	2296
5°	2301	2290	2307
10°	2288	2296	2323
15°	2269	2299	2339
20°	2244	2298	2355
25°	2212	2297	2371
30°	2179	2303	2390
35°	2139	2306	2420
40°	2107	2320	2460
45°	2073	2343	2519
50°	2020	2375	2587
55°	1980	2417	2654
60°	1929	2463	2715
65°	1854	2504	2745
70°	1755	2523	2696
75°	1604	2438	2328
80°	1348	1993	1734
85°	982	1003	655



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.0	3.0
10°-20°	233.5	8.7
20°-30°	357.0	13.3
30°-40°	438.2	16.4
40°-50°	471.2	17.6
50°-60°	452.4	16.9
60°-70°	374.7	14.0
70°-80°	224.6	8.4
80°-90°	46.0	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°	671.5	25.1
0°-40°	1109.7	41.4
0°-60°	2033.4	75.9
0°-90°	2678.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2678.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	852	850	848	855	854	81
15°	815	818	825	838	840	230
25°	745	757	774	794	799	343
35°	651	673	702	729	737	408
45°	545	573	616	650	662	419
55°	422	462	515	553	566	377
65°	291	339	393	424	431	289
75°	154	201	234	229	224	163
85°	32	46	32	22	21	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	853.2	853.2	853.2	853.2	853.2
2.5°	855.4	853.2	849.4	855.4	853.9
5°	851.7	850.1	847.9	854.7	853.9
7.5°	845.6	845.6	844.8	853.2	852.4
10°	837.3	838.8	840.3	850.1	850.1
12.5°	827.4	829.0	833.5	844.8	845.6
15°	814.6	818.4	825.2	838.0	839.6
17.5°	799.5	805.5	814.6	829.7	832.0
20°	783.6	790.4	802.5	819.1	822.2
22.5°	764.7	774.5	789.6	807.0	810.8
25°	745.0	757.1	773.7	794.2	798.7
27.5°	723.8	738.2	757.9	779.0	784.3
30°	701.1	717.8	741.2	763.9	769.2
32.5°	676.9	696.6	722.3	747.3	754.1
35°	651.2	673.2	701.9	729.1	736.7
37.5°	626.3	649.7	681.5	711.0	719.3
40°	599.8	624.7	660.3	691.3	700.4
42.5°	569.5	599.8	638.4	671.6	682.2
45°	544.6	573.3	615.7	649.7	661.8
47.5°	513.6	546.8	592.2	628.5	640.6
50°	482.6	520.4	567.3	605.1	617.9
52.5°	452.3	490.9	543.1	580.1	591.5
55°	422.0	462.1	515.1	552.9	565.8
57.5°	390.3	434.1	487.8	525.7	536.3
60°	358.5	402.4	457.6	493.9	504.5
62.5°	325.2	372.1	427.3	460.6	471.2
65°	291.2	338.8	393.3	424.3	431.1
67.5°	259.4	307.8	357.0	385.7	392.5
70°	223.1	274.6	320.7	341.9	342.6
72.5°	189.8	237.5	281.4	287.4	285.9
75°	154.3	201.2	234.5	229.2	223.9
77.5°	119.5	167.2	184.5	169.4	165.6
80°	87.0	130.1	128.6	114.2	111.9
82.5°	59.8	90.0	74.1	60.5	56.0
85°	31.8	46.1	32.5	21.9	21.2
87.5°	12.1	11.3	6.8	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)