

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: P475454

Luminaire Tested: **14CZ2-44-HRP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475454
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-44-HRP-UNV-L830-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS W/ HRP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

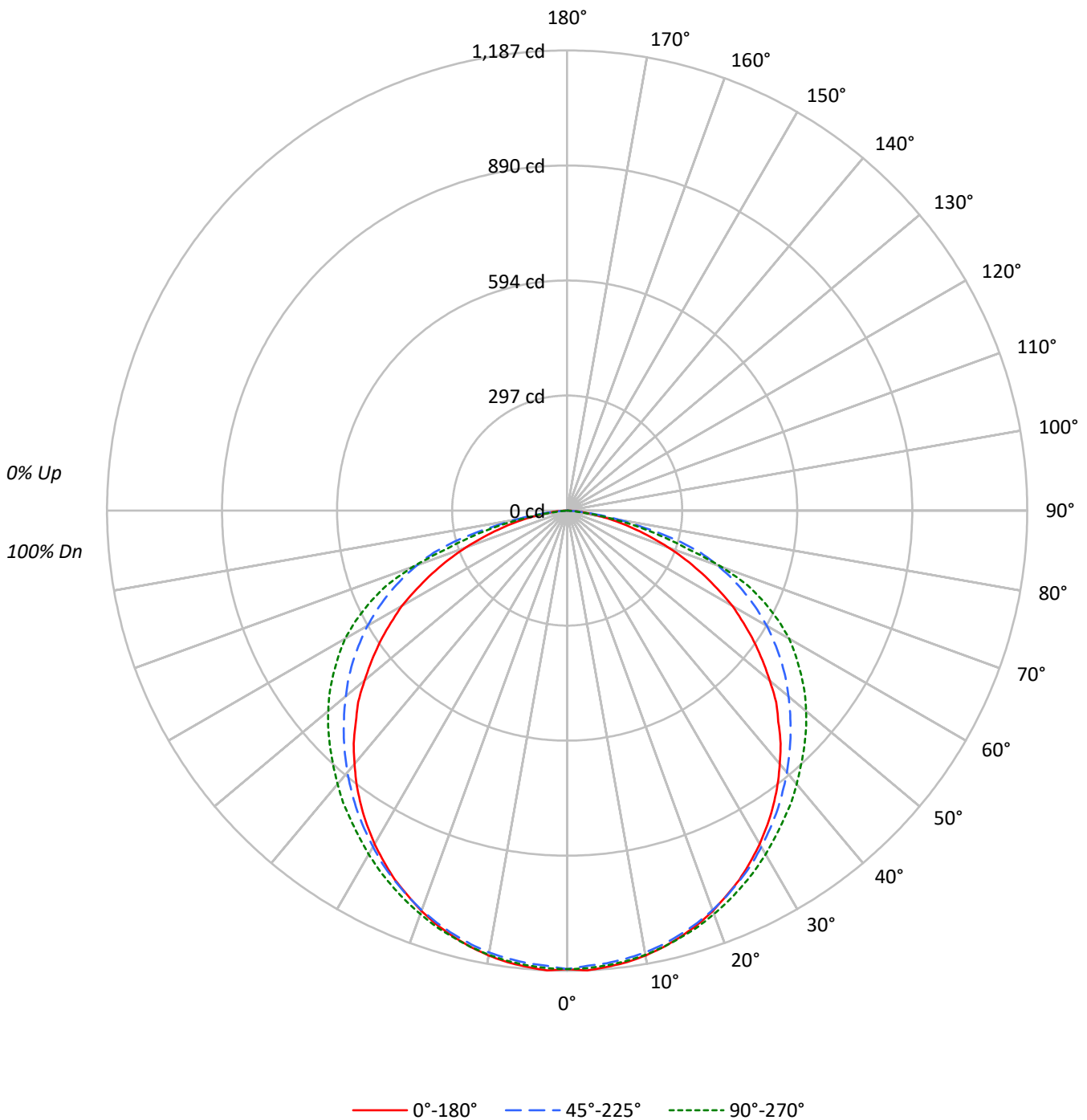
Lumens per Lamp: N/A
Luminaire Lumens: 3534.3 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.6
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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84					84			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37					37			
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	41	33	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3183	3183	3183
5°	3192	3166	3181
10°	3185	3164	3179
15°	3168	3153	3174
20°	3147	3141	3172
25°	3120	3127	3172
30°	3086	3113	3181
35°	3047	3104	3198
40°	2998	3097	3235
45°	2932	3102	3289
50°	2855	3120	3367
55°	2760	3159	3456
60°	2649	3201	3559
65°	2446	3231	3578
70°	2181	3246	3314
75°	1827	3007	2575
80°	1387	2114	1691
85°	976	741	235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	3.2
10°-20°	320.8	9.1
20°-30°	487.7	13.8
30°-40°	593.7	16.8
40°-50°	630.8	17.8
50°-60°	596.6	16.9
60°-70°	483.4	13.7
70°-80°	265.0	7.5
80°-90°	44.3	1.3
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°	920.4	26.0
0°-40°	1514.2	42.8
0°-60°	2741.6	77.6
0°-90°	3534.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3534.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1183	1183	1183	1183	1183	
5°	1182	1180	1172	1180	1178	112
15°	1137	1135	1132	1140	1139	321
25°	1051	1051	1053	1067	1068	484
35°	928	931	945	968	973	580
45°	770	782	815	852	864	595
55°	588	614	673	722	737	525
65°	384	428	507	552	562	380
75°	176	242	289	255	248	188
85°	32	42	24	12	8	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1182.9	1182.9	1182.9	1182.9	1182.9
2.5°	1187.3	1182.9	1175.3	1182.9	1181.8
5°	1181.8	1179.7	1172.0	1179.7	1177.5
7.5°	1175.3	1173.1	1165.5	1174.2	1172.0
10°	1165.5	1163.3	1157.8	1165.5	1163.3
12.5°	1152.4	1151.3	1145.8	1154.6	1152.4
15°	1137.1	1134.9	1131.6	1140.4	1139.3
17.5°	1119.6	1117.5	1115.3	1126.2	1125.1
20°	1098.9	1097.8	1096.7	1108.7	1107.6
22.5°	1074.9	1074.9	1076.0	1089.1	1089.1
25°	1050.9	1050.9	1053.1	1067.3	1068.4
27.5°	1022.5	1024.7	1029.1	1044.3	1047.6
30°	993.1	995.2	1001.8	1019.2	1023.6
32.5°	961.4	964.7	973.4	994.1	998.5
35°	927.6	930.9	945.0	968.0	973.4
37.5°	891.6	897.0	913.4	939.6	949.4
40°	853.4	862.1	881.7	910.1	921.0
42.5°	815.2	822.8	849.0	881.7	892.7
45°	770.4	782.4	815.2	852.3	864.3
47.5°	731.2	742.1	780.3	821.7	835.9
50°	682.0	698.4	745.3	791.2	804.3
52.5°	635.1	656.9	710.4	757.3	772.6
55°	588.2	614.4	673.3	722.4	736.6
57.5°	539.1	567.5	634.0	684.2	699.5
60°	492.2	522.7	594.7	646.0	661.3
62.5°	436.5	474.7	552.2	601.3	614.4
65°	384.1	427.8	507.4	552.2	562.0
67.5°	330.7	381.9	461.6	500.9	504.2
70°	277.2	335.0	412.5	436.5	421.2
72.5°	224.8	289.2	360.1	340.5	323.0
75°	175.7	242.3	289.2	255.4	247.7
77.5°	129.9	198.6	201.9	185.5	180.1
80°	89.5	153.9	136.4	117.9	109.1
82.5°	57.8	94.9	75.3	55.7	50.2
85°	31.6	41.5	24.0	12.0	7.6
87.5°	12.0	7.6	3.3	3.3	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)