

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: P475148

Luminaire Tested: **22CZ2-44HE-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475148
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44HE-HRP-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3699.4 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

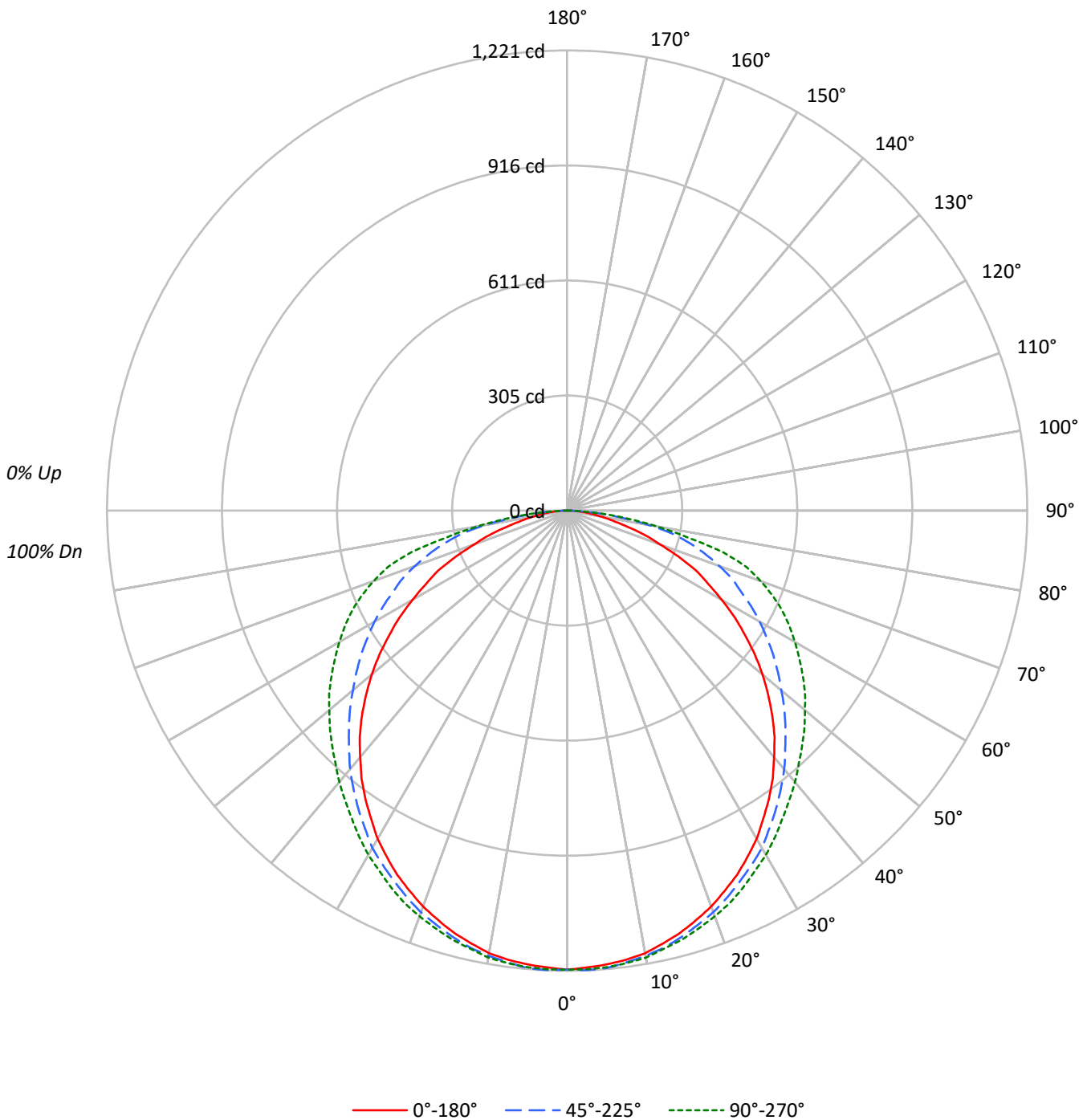
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	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	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3278	3278	3278
5°	3265	3290	3284
10°	3258	3278	3291
15°	3231	3264	3283
20°	3201	3248	3281
25°	3167	3222	3278
30°	3125	3212	3278
35°	3066	3174	3274
40°	3000	3148	3303
45°	2931	3118	3357
50°	2833	3107	3448
55°	2704	3132	3580
60°	2549	3178	3756
65°	2408	3240	4013
70°	2057	3378	4297
75°	1723	3519	4465
80°	1412	3398	3725
85°	1223	2519	2736



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.5	3.1
10°-20°	330.3	8.9
20°-30°	500.5	13.5
30°-40°	604.4	16.3
40°-50°	635.0	17.2
50°-60°	597.5	16.2
60°-70°	498.2	13.5
70°-80°	330.1	8.9
80°-90°	88.0	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°	946.2	25.6
0°-40°	1550.6	41.9
0°-60°	2783.1	75.2
0°-90°	3699.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3699.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1209	1211	1218	1218	1216	115
15°	1160	1164	1172	1176	1178	327
25°	1067	1074	1085	1099	1104	491
35°	933	943	966	987	996	584
45°	770	782	819	861	882	593
55°	576	602	668	735	763	516
65°	378	411	509	593	630	368
75°	166	231	338	408	429	180
85°	40	61	82	89	89	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1213.6	1215.8	1220.6	1220.6	1218.1
5°	1208.8	1211.1	1218.1	1218.1	1215.8
7.5°	1201.8	1204.3	1208.8	1213.6	1211.1
10°	1192.5	1194.8	1199.5	1204.3	1204.3
12.5°	1176.3	1178.5	1187.8	1190.3	1190.3
15°	1159.8	1164.5	1171.5	1176.3	1178.5
17.5°	1139.0	1143.5	1152.7	1162.2	1162.2
20°	1117.9	1122.4	1134.2	1143.5	1145.7
22.5°	1092.1	1099.2	1110.9	1122.4	1127.2
25°	1066.6	1073.6	1085.1	1099.2	1103.9
27.5°	1036.1	1043.1	1059.6	1075.9	1078.1
30°	1005.8	1012.8	1033.8	1047.8	1054.8
32.5°	968.5	977.7	998.8	1019.8	1026.8
35°	933.4	942.9	966.2	987.2	996.5
37.5°	896.1	905.4	931.1	956.9	968.5
40°	854.0	865.8	896.1	924.1	940.4
42.5°	814.5	826.2	856.5	893.8	910.1
45°	770.2	781.7	819.2	861.1	882.1
47.5°	723.3	737.4	781.7	833.2	854.0
50°	676.8	693.0	742.1	800.5	823.7
52.5°	627.7	648.7	704.8	767.9	795.7
55°	576.4	602.1	667.5	735.1	763.1
57.5°	527.3	550.8	627.7	700.1	730.4
60°	473.7	504.0	590.4	665.0	697.8
62.5°	422.4	455.2	550.8	630.2	665.0
65°	378.1	410.6	508.8	592.7	630.2
67.5°	319.7	364.0	473.7	553.1	590.4
70°	261.4	322.0	429.4	511.0	546.1
72.5°	217.1	275.4	385.1	466.7	499.5
75°	165.7	231.1	338.5	408.4	429.4
77.5°	123.7	191.3	289.4	324.5	326.7
80°	91.1	147.0	219.3	231.1	240.4
82.5°	63.1	102.7	142.5	156.2	161.0
85°	39.6	60.6	81.6	88.6	88.6
87.5°	21.0	23.3	28.0	28.0	28.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)