

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: P474235

Luminaire Tested: **24CZ2-45VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474235
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45VHE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3051.9 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

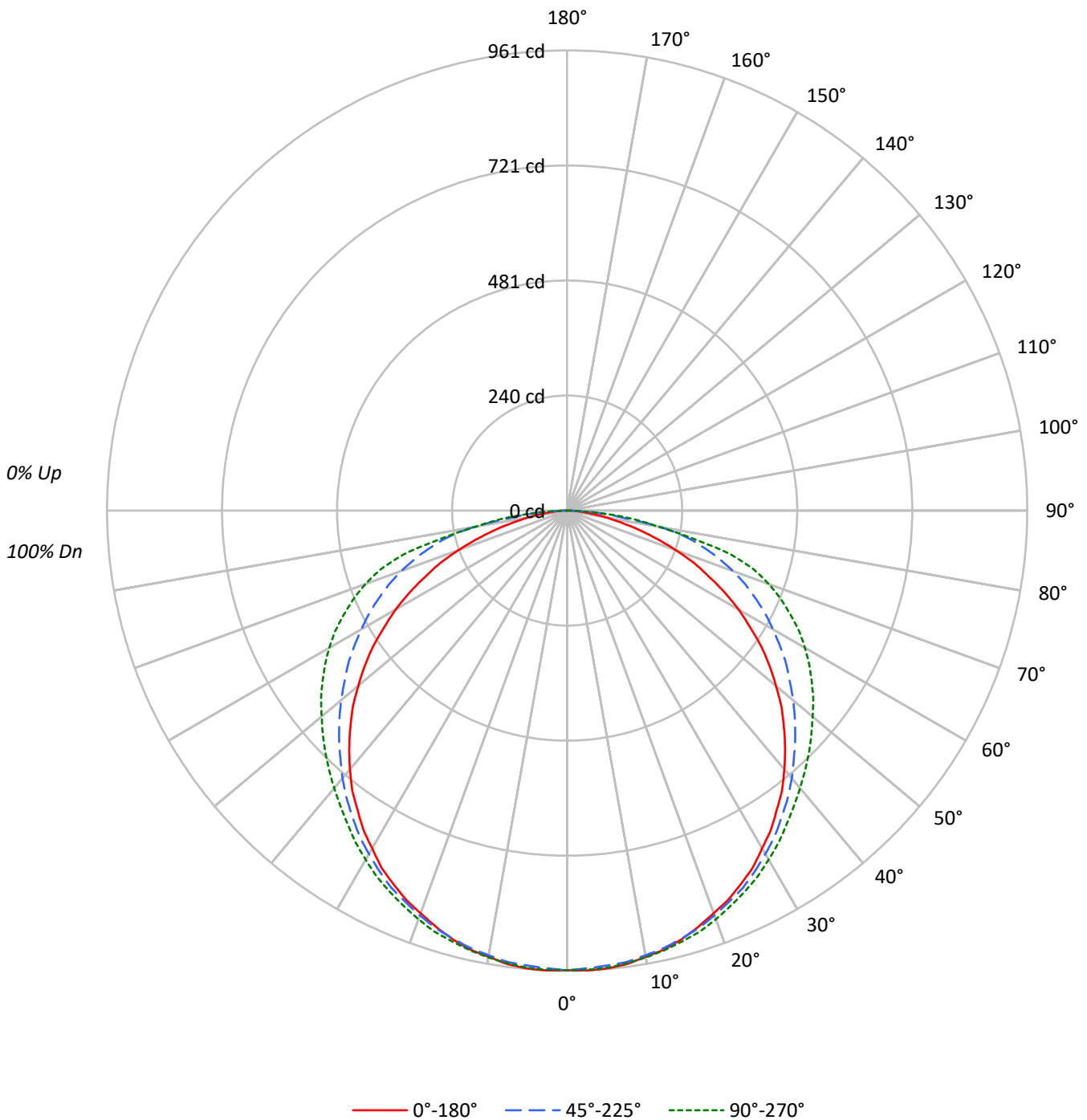
Input Watts (W): 30.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1291	1291	1291
5°	1296	1288	1294
10°	1293	1289	1295
15°	1291	1288	1297
20°	1281	1288	1301
25°	1276	1290	1303
30°	1265	1286	1308
35°	1253	1283	1313
40°	1239	1281	1329
45°	1219	1282	1359
50°	1191	1290	1401
55°	1161	1310	1463
60°	1112	1336	1544
65°	1041	1383	1638
70°	947	1447	1762
75°	802	1527	1842
80°	634	1537	1489
85°	468	1169	1309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.0	3.0
10°-20°	262.0	8.6
20°-30°	400.7	13.1
30°-40°	489.8	16.0
40°-50°	522.1	17.1
50°-60°	499.1	16.4
60°-70°	422.8	13.9
70°-80°	284.2	9.3
80°-90°	80.2	2.6
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°	753.7	24.7
0°-40°	1243.5	40.7
0°-60°	2264.7	74.2
0°-90°	3051.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3051.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	960	958	954	958	958	91
15°	926	926	925	932	931	261
25°	860	863	869	876	878	396
35°	763	769	781	796	799	478
45°	640	651	674	702	714	494
55°	495	513	559	602	624	441
65°	327	360	434	492	515	325
75°	154	210	294	344	354	165
85°	30	62	76	82	85	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	959.8	959.8	959.8	959.8	959.8
2.5°	961.3	961.3	956.8	959.8	959.8
5°	959.8	958.3	953.7	958.3	958.3
7.5°	955.2	953.7	950.7	955.2	953.7
10°	946.1	946.1	943.1	947.7	947.7
12.5°	938.6	937.1	935.5	941.6	940.1
15°	926.5	926.5	924.9	932.5	931.0
17.5°	911.3	912.8	914.3	920.4	921.9
20°	894.7	897.7	899.2	908.3	908.3
22.5°	879.5	881.0	884.1	893.1	893.1
25°	859.8	862.8	868.9	876.5	878.0
27.5°	840.1	841.6	849.2	859.8	861.3
30°	814.4	818.9	828.0	840.1	841.6
32.5°	791.7	796.2	806.8	818.9	822.0
35°	762.9	768.9	781.1	796.2	799.2
37.5°	737.1	741.7	756.8	773.5	778.0
40°	705.5	714.4	729.6	749.3	756.8
42.5°	673.7	682.8	700.9	726.5	735.6
45°	640.4	651.0	673.7	702.5	714.4
47.5°	607.0	619.2	644.9	678.2	691.9
50°	569.2	584.3	616.1	654.0	669.1
52.5°	532.8	551.0	585.8	628.2	647.9
55°	495.0	513.1	558.6	602.5	623.7
57.5°	452.6	476.8	526.8	576.7	599.5
60°	413.3	435.9	496.5	551.0	573.7
62.5°	370.9	401.2	466.2	523.7	546.5
65°	327.0	360.3	434.4	491.9	514.6
67.5°	287.6	324.0	402.7	460.1	482.8
70°	240.7	286.1	367.9	425.3	448.0
72.5°	196.7	246.7	331.5	387.6	408.8
75°	154.3	210.4	293.7	343.7	354.3
77.5°	115.1	174.0	254.3	275.5	267.9
80°	81.8	139.3	198.3	187.7	192.2
82.5°	53.0	106.0	122.7	139.3	143.7
85°	30.3	62.1	75.7	81.8	84.8
87.5°	13.6	22.7	30.3	30.3	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)