

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: P474025

Luminaire Tested: **24CZ2-60HE-S-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474025
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-60HE-S-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

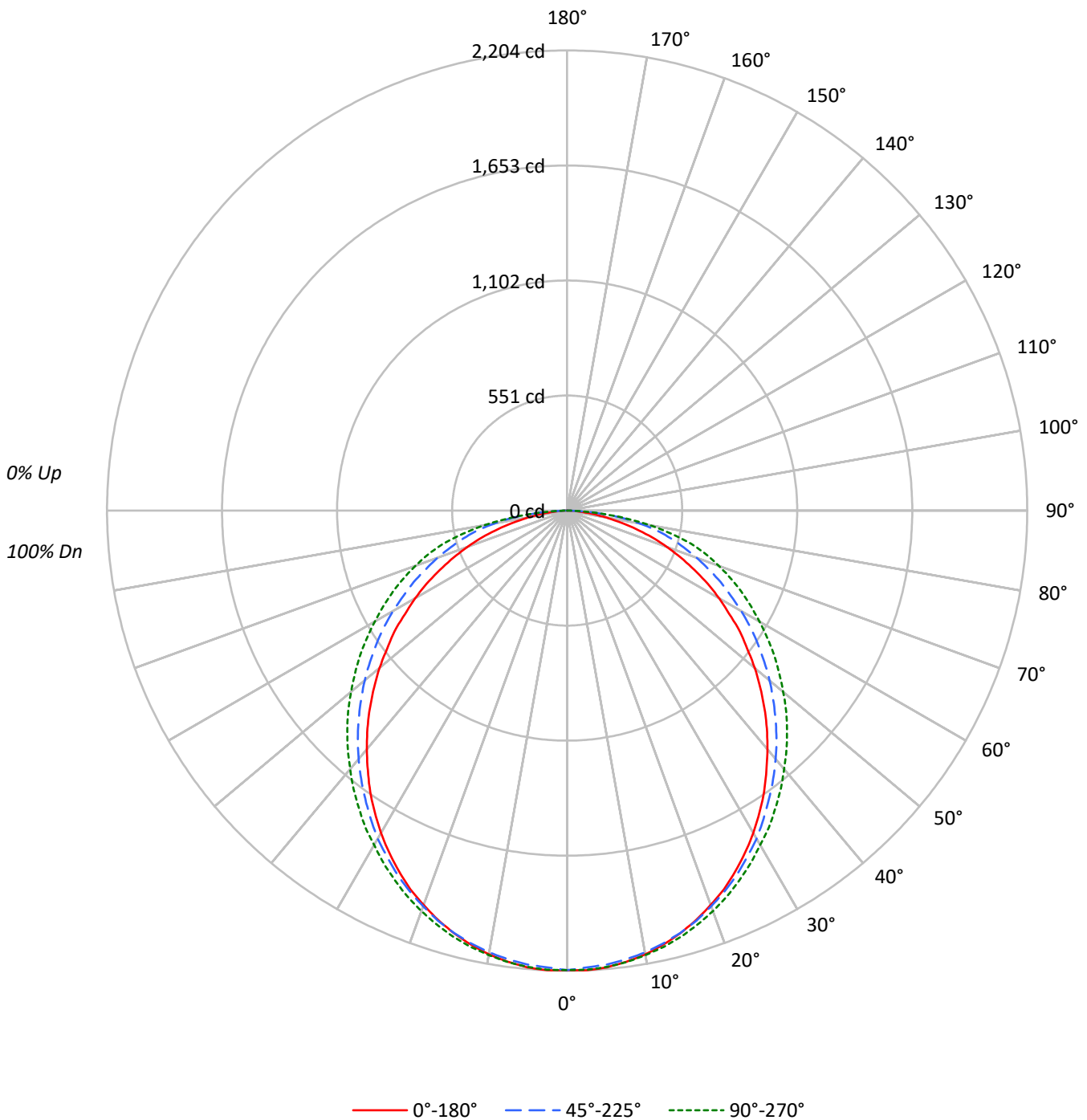
Lumens per Lamp: N/A
Luminaire Lumens: 6305.7 lumens
Efficiency: N/A
Efficacy: 143.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44.1
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	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74		81	76	72		78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	61		68	64	59	57
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61	55	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	34	32
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2961	2961	2961
5°	2966	2947	2963
10°	2949	2936	2953
15°	2919	2917	2942
20°	2879	2887	2923
25°	2831	2855	2900
30°	2771	2819	2872
35°	2702	2770	2856
40°	2621	2729	2840
45°	2542	2686	2834
50°	2456	2649	2827
55°	2369	2617	2843
60°	2260	2592	2862
65°	2140	2582	2932
70°	1996	2596	3035
75°	1777	2671	3198
80°	1453	2729	3122
85°	1024	2382	2430



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.1	3.3
10°-20°	592.6	9.4
20°-30°	888.4	14.1
30°-40°	1058.1	16.8
40°-50°	1090.9	17.3
50°-60°	995.5	15.8
60°-70°	796.0	12.6
70°-80°	520.0	8.2
80°-90°	156.1	2.5
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°	1689.1	26.8
0°-40°	2747.1	43.6
0°-60°	4833.6	76.7
0°-90°	6305.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6305.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2201	2201	2201	2201	2201	
5°	2196	2192	2182	2196	2194	208
15°	2095	2096	2094	2112	2112	591
25°	1907	1910	1923	1951	1953	878
35°	1645	1656	1686	1729	1739	1027
45°	1336	1360	1412	1471	1489	1030
55°	1010	1039	1116	1189	1212	899
65°	672	718	811	891	921	667
75°	342	399	514	597	615	363
85°	66	119	154	157	157	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2201.0	2201.0	2201.0	2201.0	2201.0
2.5°	2204.1	2201.0	2189.6	2203.0	2201.0
5°	2195.8	2191.6	2182.3	2195.8	2193.7
7.5°	2179.2	2177.1	2167.8	2183.4	2181.3
10°	2158.5	2156.4	2149.2	2164.7	2161.6
12.5°	2129.5	2128.5	2123.3	2141.9	2139.9
15°	2095.3	2096.4	2094.3	2111.9	2111.9
17.5°	2056.0	2054.9	2059.1	2080.8	2078.7
20°	2010.4	2011.4	2016.6	2041.5	2041.5
22.5°	1962.7	1961.7	1973.1	1998.0	2000.0
25°	1906.8	1909.9	1923.4	1951.4	1953.4
27.5°	1846.7	1851.9	1868.5	1900.6	1903.7
30°	1783.6	1789.8	1814.6	1844.7	1848.8
32.5°	1714.2	1727.6	1750.4	1788.7	1799.1
35°	1644.8	1656.2	1686.2	1728.7	1739.0
37.5°	1568.1	1586.8	1620.9	1667.6	1681.0
40°	1492.5	1511.2	1553.6	1602.3	1616.8
42.5°	1415.9	1435.5	1484.2	1539.1	1554.7
45°	1336.1	1359.9	1411.7	1470.8	1489.4
47.5°	1254.3	1282.3	1338.2	1402.4	1423.1
50°	1173.5	1201.5	1265.7	1332.0	1350.6
52.5°	1086.5	1121.7	1190.1	1261.5	1280.2
55°	1009.9	1038.9	1115.5	1189.0	1211.8
57.5°	919.7	959.1	1040.9	1115.5	1137.3
60°	840.0	876.2	963.2	1038.9	1063.7
62.5°	759.2	796.5	883.5	969.5	992.2
65°	672.2	717.8	811.0	890.7	920.8
67.5°	589.3	637.0	732.3	817.2	848.3
70°	507.5	556.2	659.8	746.8	771.6
72.5°	426.7	477.5	585.2	670.1	699.1
75°	341.8	398.8	513.7	596.6	615.2
77.5°	262.0	325.2	441.2	497.2	510.6
80°	187.5	256.9	352.2	392.5	402.9
82.5°	123.3	190.6	263.1	284.8	281.7
85°	66.3	119.1	154.3	157.4	157.4
87.5°	25.9	47.6	48.7	37.3	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)