

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: P474275

Luminaire Tested: **24CZ2-60HE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474275
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-60HE-RDP-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4220.7 lumens
Efficiency: N/A
Efficacy: 95.7 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

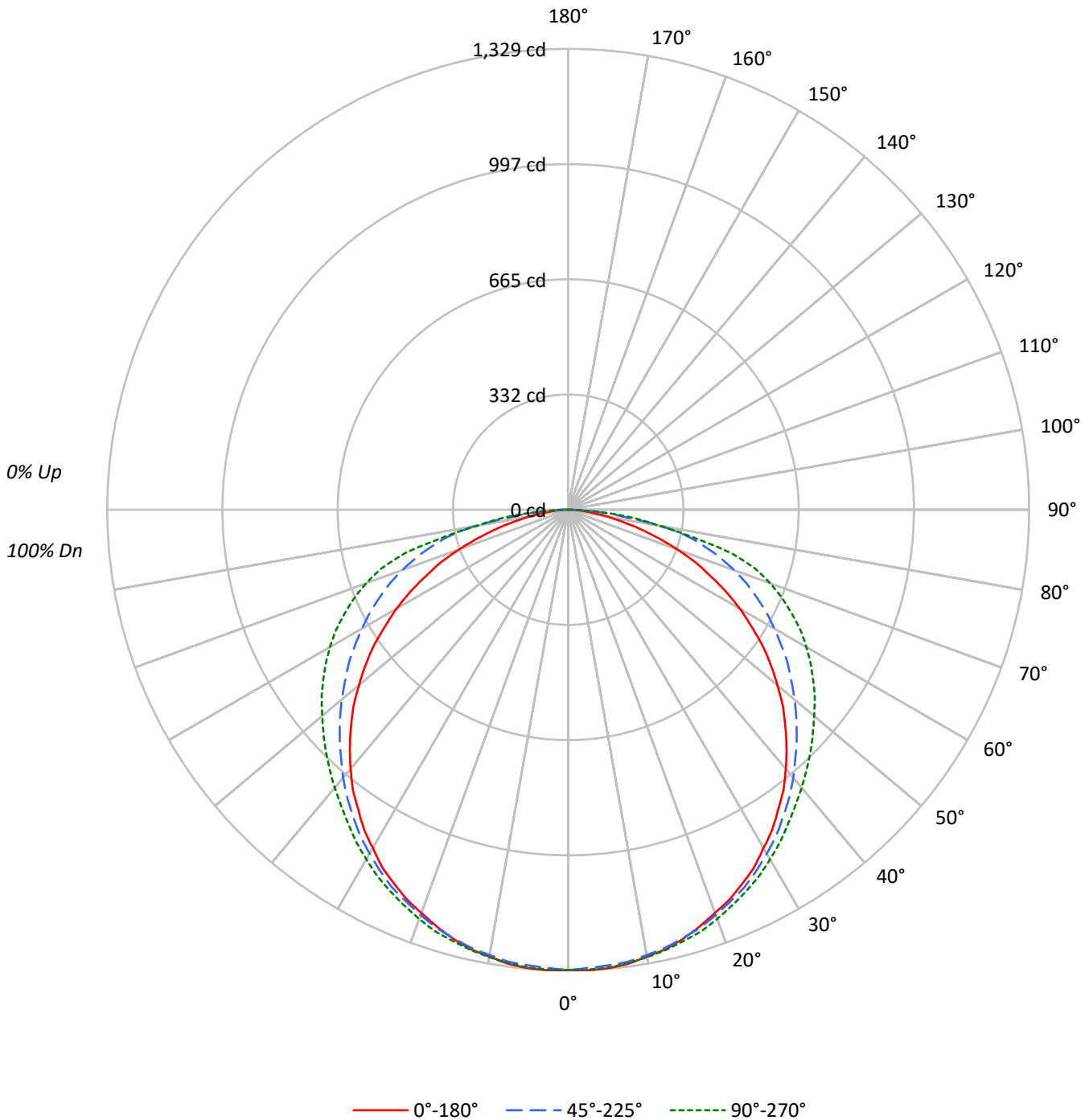
Input Watts (W): 44.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1786	1786	1786
5°	1793	1781	1790
10°	1788	1782	1791
15°	1785	1782	1794
20°	1772	1781	1799
25°	1765	1784	1803
30°	1750	1779	1808
35°	1733	1774	1815
40°	1714	1772	1838
45°	1685	1773	1880
50°	1648	1784	1937
55°	1606	1812	2023
60°	1538	1848	2135
65°	1440	1912	2266
70°	1309	2002	2437
75°	1109	2111	2547
80°	876	2125	2060
85°	647	1616	1811



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.9	3.0
10°-20°	362.4	8.6
20°-30°	554.1	13.1
30°-40°	677.4	16.0
40°-50°	722.0	17.1
50°-60°	690.3	16.4
60°-70°	584.7	13.9
70°-80°	393.0	9.3
80°-90°	110.9	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°	1042.4	24.7
0°-40°	1719.8	40.7
0°-60°	3132.0	74.2
0°-90°	4220.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4220.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1327	1327	1327	1327	1327	
5°	1327	1325	1319	1325	1325	126
15°	1281	1281	1279	1290	1288	361
25°	1189	1193	1202	1212	1214	548
35°	1055	1063	1080	1101	1105	661
45°	886	900	932	972	988	683
55°	684	710	772	833	863	610
65°	452	498	601	680	712	449
75°	213	291	406	475	490	229
85°	42	86	105	113	117	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1327.4	1327.4	1327.4	1327.4	1327.4
2.5°	1329.4	1329.4	1323.2	1327.4	1327.4
5°	1327.4	1325.3	1319.0	1325.3	1325.3
7.5°	1321.1	1319.0	1314.8	1321.1	1319.0
10°	1308.5	1308.5	1304.3	1310.6	1310.6
12.5°	1298.0	1295.9	1293.8	1302.2	1300.1
15°	1281.3	1281.3	1279.2	1289.7	1287.6
17.5°	1260.3	1262.4	1264.5	1272.9	1275.0
20°	1237.3	1241.5	1243.6	1256.1	1256.1
22.5°	1216.3	1218.4	1222.6	1235.2	1235.2
25°	1189.1	1193.3	1201.7	1212.2	1214.2
27.5°	1161.9	1164.0	1174.4	1189.1	1191.2
30°	1126.3	1132.6	1145.1	1161.9	1164.0
32.5°	1094.9	1101.1	1115.8	1132.6	1136.7
35°	1055.1	1063.4	1080.2	1101.1	1105.3
37.5°	1019.4	1025.7	1046.7	1069.7	1076.0
40°	975.7	988.0	1009.0	1036.2	1046.7
42.5°	931.7	944.2	969.4	1004.8	1017.4
45°	885.6	900.3	931.7	971.5	988.0
47.5°	839.5	856.3	891.9	938.0	956.8
50°	787.2	808.1	852.1	904.5	925.4
52.5°	736.9	762.0	810.2	868.8	896.1
55°	684.5	709.7	772.5	833.2	862.6
57.5°	625.9	659.4	728.5	797.6	829.0
60°	571.6	602.8	686.6	762.0	793.4
62.5°	513.0	554.9	644.7	724.3	755.7
65°	452.2	498.3	600.7	680.3	711.7
67.5°	397.8	448.0	557.0	636.3	667.8
70°	332.8	395.7	508.8	588.2	619.6
72.5°	272.1	341.2	458.5	536.0	565.3
75°	213.4	290.9	406.1	475.3	489.9
77.5°	159.2	240.7	351.7	381.0	370.5
80°	113.1	192.7	274.2	259.5	265.8
82.5°	73.3	146.6	169.7	192.7	198.8
85°	41.9	85.9	104.7	113.1	117.3
87.5°	18.9	31.4	41.9	41.9	39.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)