

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: P474267

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

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474267  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-60-RDP-UNV-L840-CD1-U  
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4075.3 lumens  
Efficiency: N/A  
Efficacy: 88.0 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

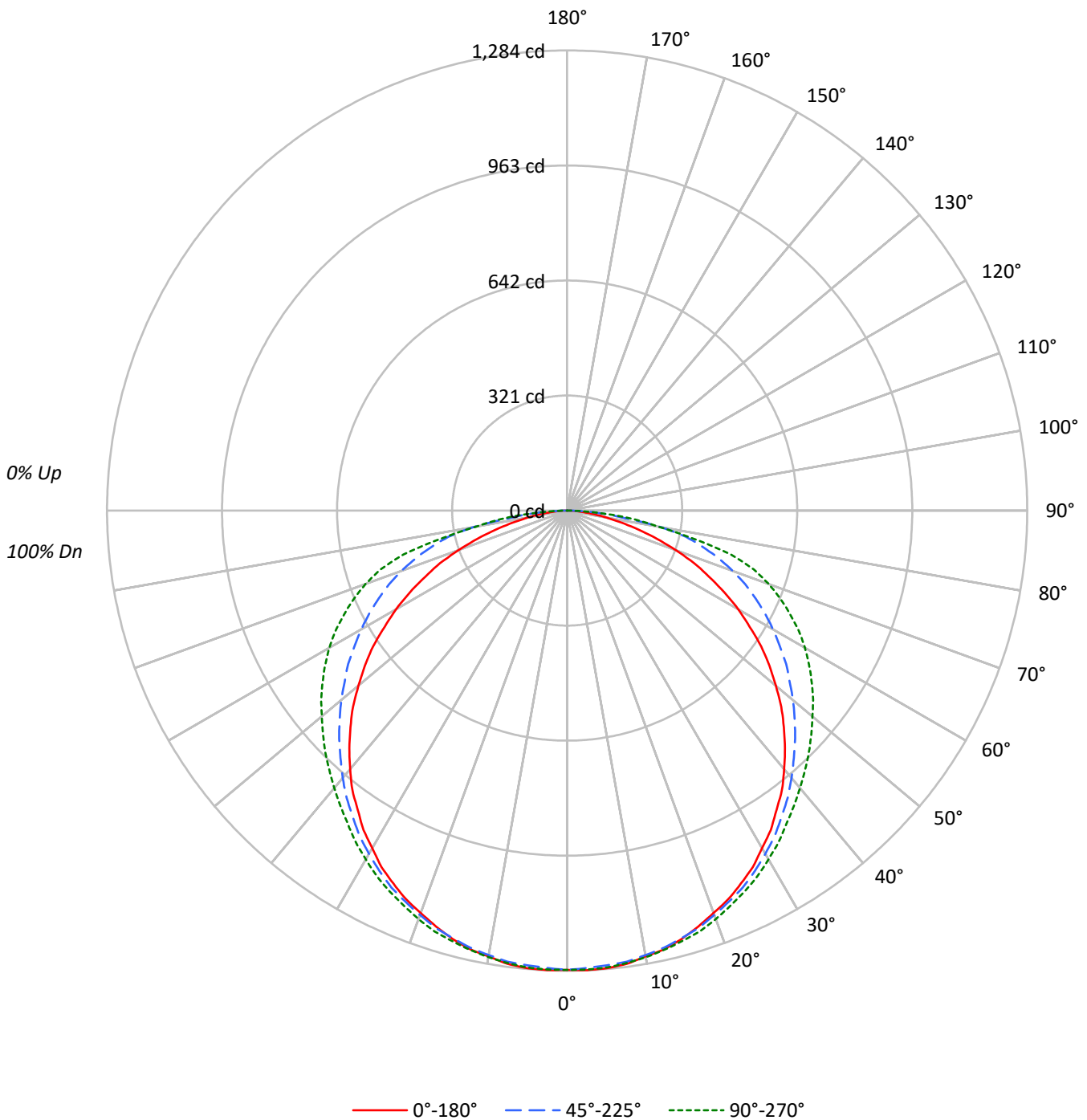
Input Watts (W): 46.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1724	1724	1724
5°	1731	1720	1728
10°	1726	1721	1729
15°	1723	1720	1732
20°	1711	1719	1737
25°	1704	1723	1741
30°	1690	1718	1746
35°	1673	1713	1753
40°	1655	1711	1775
45°	1627	1712	1815
50°	1591	1722	1870
55°	1550	1750	1954
60°	1485	1784	2062
65°	1390	1847	2188
70°	1264	1933	2353
75°	1071	2039	2459
80°	846	2051	1988
85°	624	1561	1749



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.6	3.0
10°-20°	349.9	8.6
20°-30°	535.0	13.1
30°-40°	654.0	16.0
40°-50°	697.1	17.1
50°-60°	666.5	16.4
60°-70°	564.6	13.9
70°-80°	379.5	9.3
80°-90°	107.1	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°	1006.5	24.7
0°-40°	1660.5	40.7
0°-60°	3024.1	74.2
0°-90°	4075.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4075.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1282	1282	1282	1282	1282	
5°	1282	1280	1274	1280	1280	122
15°	1237	1237	1235	1245	1243	349
25°	1148	1152	1160	1170	1172	529
35°	1019	1027	1043	1063	1067	638
45°	855	869	900	938	954	660
55°	661	685	746	804	833	589
65°	437	481	580	657	687	433
75°	206	281	392	459	473	221
85°	40	83	101	109	113	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1281.6	1281.6	1281.6	1281.6	1281.6
2.5°	1283.6	1283.6	1277.6	1281.6	1281.6
5°	1281.6	1279.6	1273.5	1279.6	1279.6
7.5°	1275.6	1273.5	1269.5	1275.6	1273.5
10°	1263.4	1263.4	1259.4	1265.4	1265.4
12.5°	1253.3	1251.3	1249.3	1257.4	1255.3
15°	1237.1	1237.1	1235.1	1245.2	1243.2
17.5°	1216.9	1218.9	1220.9	1229.0	1231.1
20°	1194.7	1198.7	1200.7	1212.9	1212.9
22.5°	1174.4	1176.5	1180.5	1192.6	1192.6
25°	1148.1	1152.2	1160.3	1170.4	1172.4
27.5°	1121.8	1123.9	1134.0	1148.1	1150.2
30°	1087.5	1093.5	1105.7	1121.8	1123.9
32.5°	1057.1	1063.2	1077.4	1093.5	1097.6
35°	1018.7	1026.8	1043.0	1063.2	1067.2
37.5°	984.3	990.4	1010.6	1032.9	1038.9
40°	942.1	954.0	974.2	1000.5	1010.6
42.5°	899.6	911.7	936.0	970.2	982.3
45°	855.1	869.2	899.6	938.0	954.0
47.5°	810.6	826.8	861.2	905.6	923.9
50°	760.0	780.3	822.7	873.3	893.5
52.5°	711.5	735.8	782.3	838.9	865.2
55°	660.9	685.2	745.9	804.5	832.8
57.5°	604.3	636.7	703.4	770.1	800.5
60°	551.9	582.1	663.0	735.8	766.1
62.5°	495.3	535.7	622.5	699.4	729.7
65°	436.6	481.1	580.0	656.9	687.2
67.5°	384.1	432.6	537.8	614.4	644.8
70°	321.4	382.0	491.3	567.9	598.2
72.5°	262.7	329.5	442.7	517.5	545.9
75°	206.1	280.9	392.2	458.9	473.0
77.5°	153.7	232.4	339.6	367.9	357.8
80°	109.2	186.1	264.7	250.6	256.6
82.5°	70.8	141.6	163.8	186.1	191.9
85°	40.4	82.9	101.1	109.2	113.3
87.5°	18.2	30.3	40.4	40.4	38.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)