

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: P474213

Luminaire Tested: **24CZ2-40-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474213
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

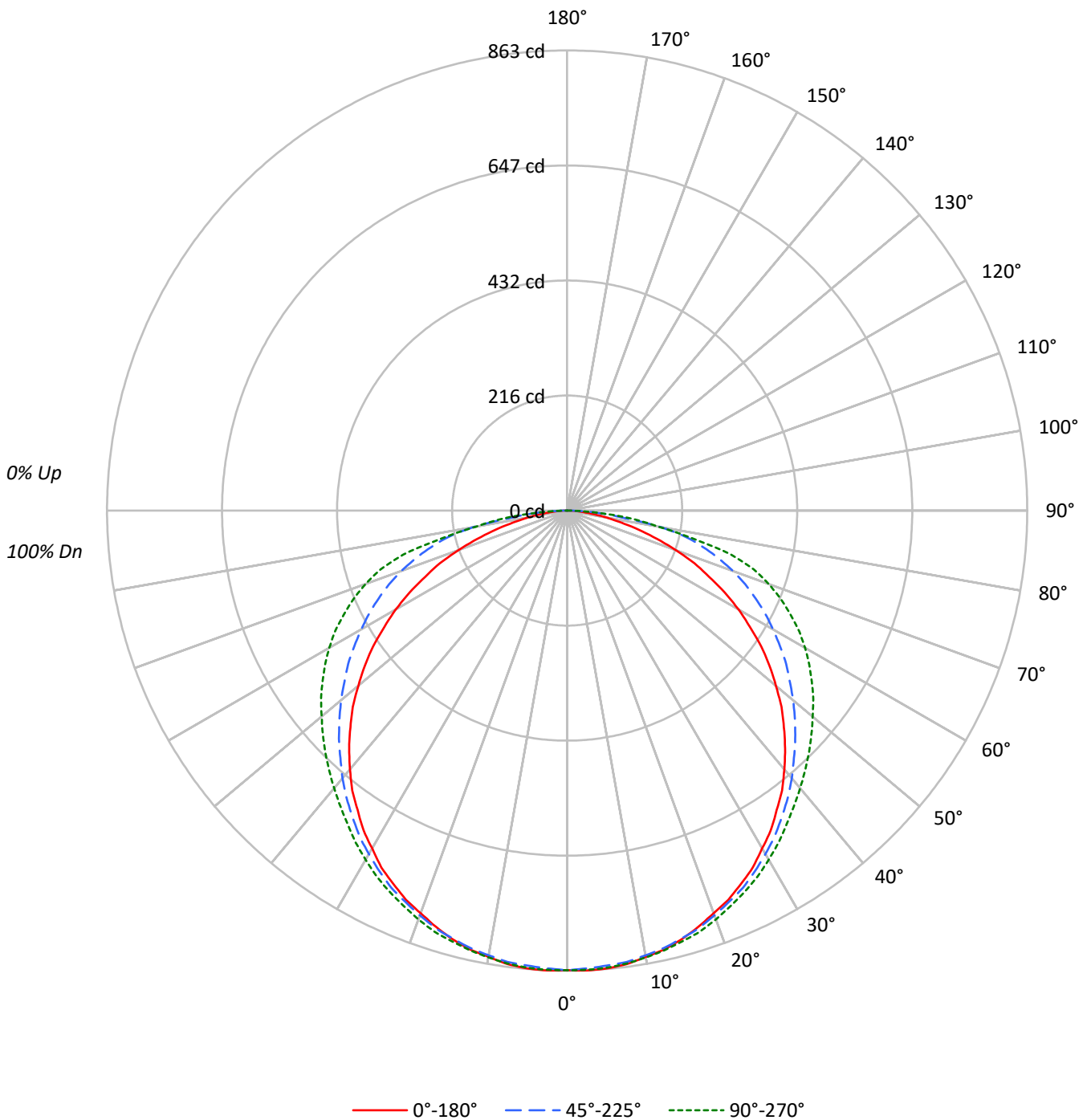
Lumens per Lamp: N/A
Luminaire Lumens: 2741.0 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.6
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°	1160	1160	1160
5°	1164	1157	1162
10°	1161	1157	1163
15°	1159	1157	1165
20°	1150	1156	1168
25°	1146	1159	1171
30°	1136	1155	1174
35°	1125	1152	1179
40°	1113	1151	1194
45°	1094	1151	1221
50°	1070	1158	1258
55°	1043	1177	1314
60°	999	1200	1387
65°	935	1242	1472
70°	850	1300	1583
75°	721	1371	1654
80°	570	1380	1337
85°	420	1050	1176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	3.0
10°-20°	235.3	8.6
20°-30°	359.9	13.1
30°-40°	439.9	16.0
40°-50°	468.9	17.1
50°-60°	448.3	16.4
60°-70°	379.8	13.9
70°-80°	255.2	9.3
80°-90°	72.0	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°	677.0	24.7
0°-40°	1116.8	40.7
0°-60°	2034.0	74.2
0°-90°	2741.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2741.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	862	861	857	861	861	82
15°	832	832	831	838	836	235
25°	772	775	780	787	789	356
35°	685	691	702	715	718	429
45°	575	585	605	631	642	444
55°	444	461	502	541	560	396
65°	294	324	390	442	462	292
75°	139	189	264	309	318	148
85°	27	56	68	74	76	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	862.0	862.0	862.0	862.0	862.0
2.5°	863.4	863.4	859.3	862.0	862.0
5°	862.0	860.7	856.6	860.7	860.7
7.5°	857.9	856.6	853.8	857.9	856.6
10°	849.8	849.8	847.0	851.1	851.1
12.5°	843.0	841.6	840.2	845.7	844.3
15°	832.1	832.1	830.7	837.5	836.2
17.5°	818.5	819.8	821.2	826.6	828.0
20°	803.5	806.2	807.6	815.8	815.8
22.5°	789.9	791.3	794.0	802.2	802.2
25°	772.2	775.0	780.4	787.2	788.6
27.5°	754.5	755.9	762.7	772.2	773.6
30°	731.4	735.5	743.7	754.5	755.9
32.5°	711.0	715.1	724.6	735.5	738.2
35°	685.2	690.6	701.5	715.1	717.8
37.5°	662.0	666.1	679.7	694.7	698.8
40°	633.6	641.6	655.2	672.9	679.7
42.5°	605.1	613.2	629.5	652.5	660.7
45°	575.1	584.6	605.1	630.9	641.6
47.5°	545.2	556.1	579.2	609.1	621.4
50°	511.2	524.8	553.4	587.4	601.0
52.5°	478.5	494.9	526.2	564.2	581.9
55°	444.5	460.9	501.7	541.1	560.2
57.5°	406.5	428.2	473.1	518.0	538.4
60°	371.2	391.5	445.9	494.9	515.3
62.5°	333.1	360.3	418.7	470.4	490.8
65°	293.7	323.6	390.1	441.8	462.2
67.5°	258.3	291.0	361.7	413.3	433.7
70°	216.1	257.0	330.4	382.0	402.4
72.5°	176.7	221.6	297.8	348.1	367.1
75°	138.6	188.9	263.8	308.6	318.2
77.5°	103.4	156.3	228.4	247.4	240.6
80°	73.5	125.1	178.1	168.5	172.6
82.5°	47.6	95.2	110.2	125.1	129.1
85°	27.2	55.8	68.0	73.5	76.2
87.5°	12.2	20.4	27.2	27.2	25.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)