

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: P276064

Luminaire Tested: **24CZ2-40HE-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276064
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40HE-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3914.6 lumens
Efficiency: N/A
Efficacy: 135.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

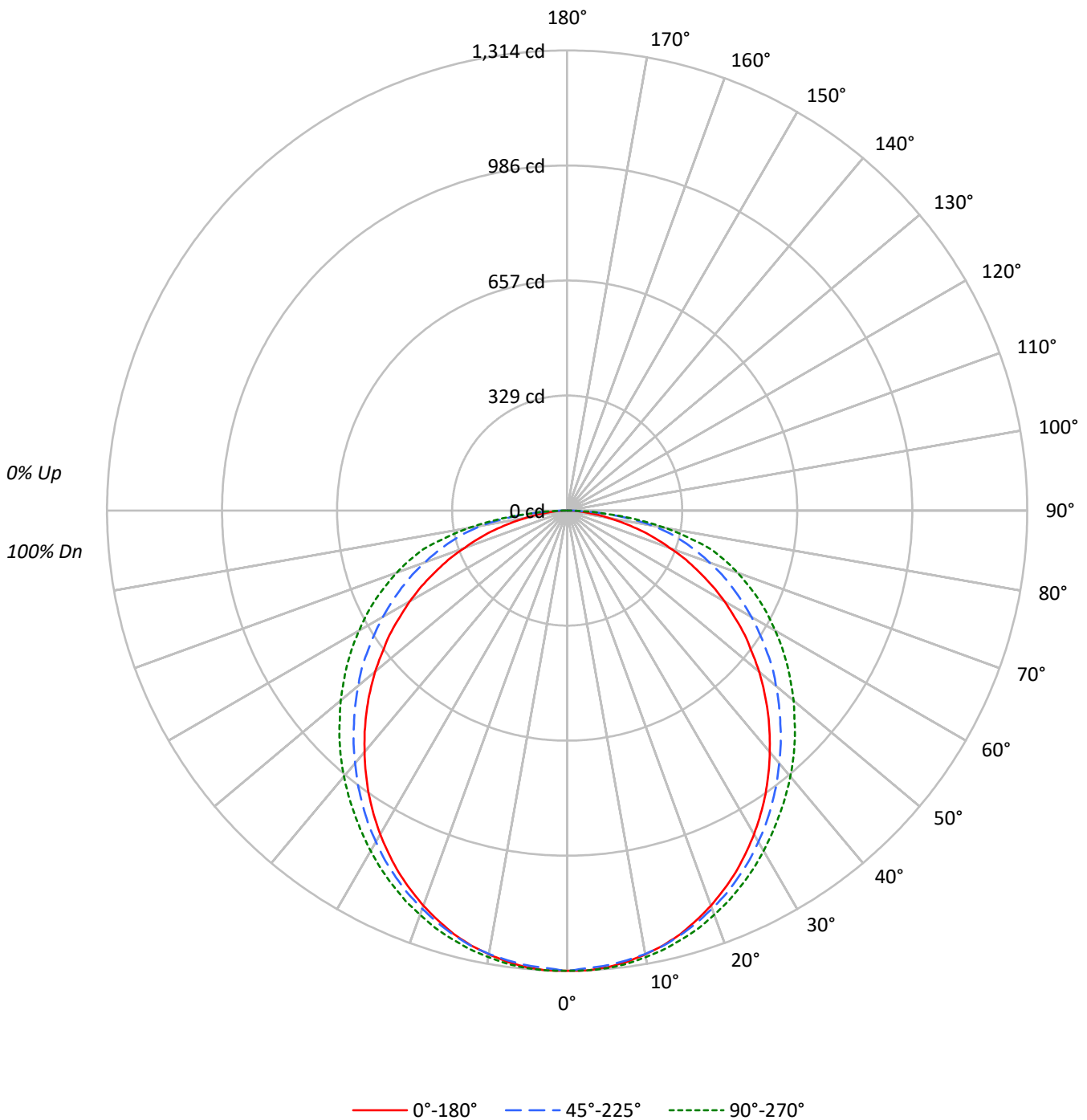
Input Watts (W): 28.83
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1768	1768	1768
5°	1768	1761	1772
10°	1758	1756	1769
15°	1743	1747	1765
20°	1719	1732	1758
25°	1691	1716	1751
30°	1658	1697	1743
35°	1622	1676	1738
40°	1581	1655	1742
45°	1541	1638	1750
50°	1499	1630	1767
55°	1453	1627	1799
60°	1396	1635	1846
65°	1323	1660	1926
70°	1228	1701	2035
75°	1121	1786	2207
80°	921	1923	2207
85°	706	1775	1896



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.3	3.2
10°-20°	354.9	9.1
20°-30°	534.0	13.6
30°-40°	640.0	16.3
40°-50°	666.9	17.0
50°-60°	620.5	15.9
60°-70°	511.1	13.1
70°-80°	348.0	8.9
80°-90°	114.9	2.9
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°	1013.2	25.9
0°-40°	1653.2	42.2
0°-60°	2940.6	75.1
0°-90°	3914.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3914.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1314	1314	1314	1314	1314	
5°	1309	1309	1304	1310	1312	124
15°	1252	1253	1254	1266	1267	353
25°	1139	1144	1156	1176	1180	524
35°	988	999	1020	1048	1058	617
45°	810	827	861	904	920	625
55°	619	640	694	749	767	552
65°	416	451	521	583	605	412
75°	216	264	344	405	425	227
85°	46	89	115	123	123	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1314.3	1314.3	1314.3	1314.3	1314.3
2.5°	1314.3	1314.3	1307.8	1314.3	1314.3
5°	1309.1	1309.1	1303.8	1310.4	1311.7
7.5°	1299.9	1301.2	1296.0	1303.8	1305.2
10°	1286.9	1288.2	1285.6	1293.4	1294.7
12.5°	1271.2	1272.5	1272.5	1281.6	1282.9
15°	1251.6	1252.9	1254.2	1266.0	1267.3
17.5°	1226.8	1230.7	1233.3	1247.7	1250.3
20°	1200.6	1204.6	1209.8	1225.5	1228.1
22.5°	1170.6	1175.8	1185.0	1201.9	1205.9
25°	1139.2	1144.5	1156.2	1175.8	1179.7
27.5°	1104.0	1111.8	1126.2	1147.1	1152.3
30°	1067.4	1075.2	1092.2	1114.4	1122.2
32.5°	1028.2	1038.6	1058.2	1083.1	1090.9
35°	987.7	999.4	1020.3	1047.8	1058.2
37.5°	944.6	957.6	982.5	1012.5	1025.6
40°	900.1	915.8	942.0	977.2	991.6
42.5°	855.7	870.1	902.8	940.6	956.3
45°	810.0	827.0	861.0	904.1	919.7
47.5°	763.0	780.0	820.5	866.2	880.6
50°	715.9	732.9	778.6	827.0	844.0
52.5°	665.0	687.2	739.5	787.8	804.8
55°	619.3	640.2	693.7	748.6	766.9
57.5°	567.0	591.8	650.6	708.1	727.7
60°	518.7	544.8	607.5	666.3	685.9
62.5°	469.0	497.8	564.4	624.5	646.7
65°	415.5	450.7	521.3	582.7	604.9
67.5°	367.1	403.7	478.2	540.9	560.5
70°	312.2	356.7	432.4	495.1	517.4
72.5°	265.2	309.6	389.3	450.7	472.9
75°	215.6	263.9	343.6	405.0	424.6
77.5°	165.9	219.5	299.2	346.2	352.7
80°	118.9	175.1	248.2	275.7	284.8
82.5°	83.6	134.6	182.9	201.2	206.4
85°	45.7	88.8	115.0	122.8	122.8
87.5°	19.6	37.9	45.7	47.0	48.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)