

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: P276573

Luminaire Tested: **24CZ2-40-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40-S-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4016.7 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

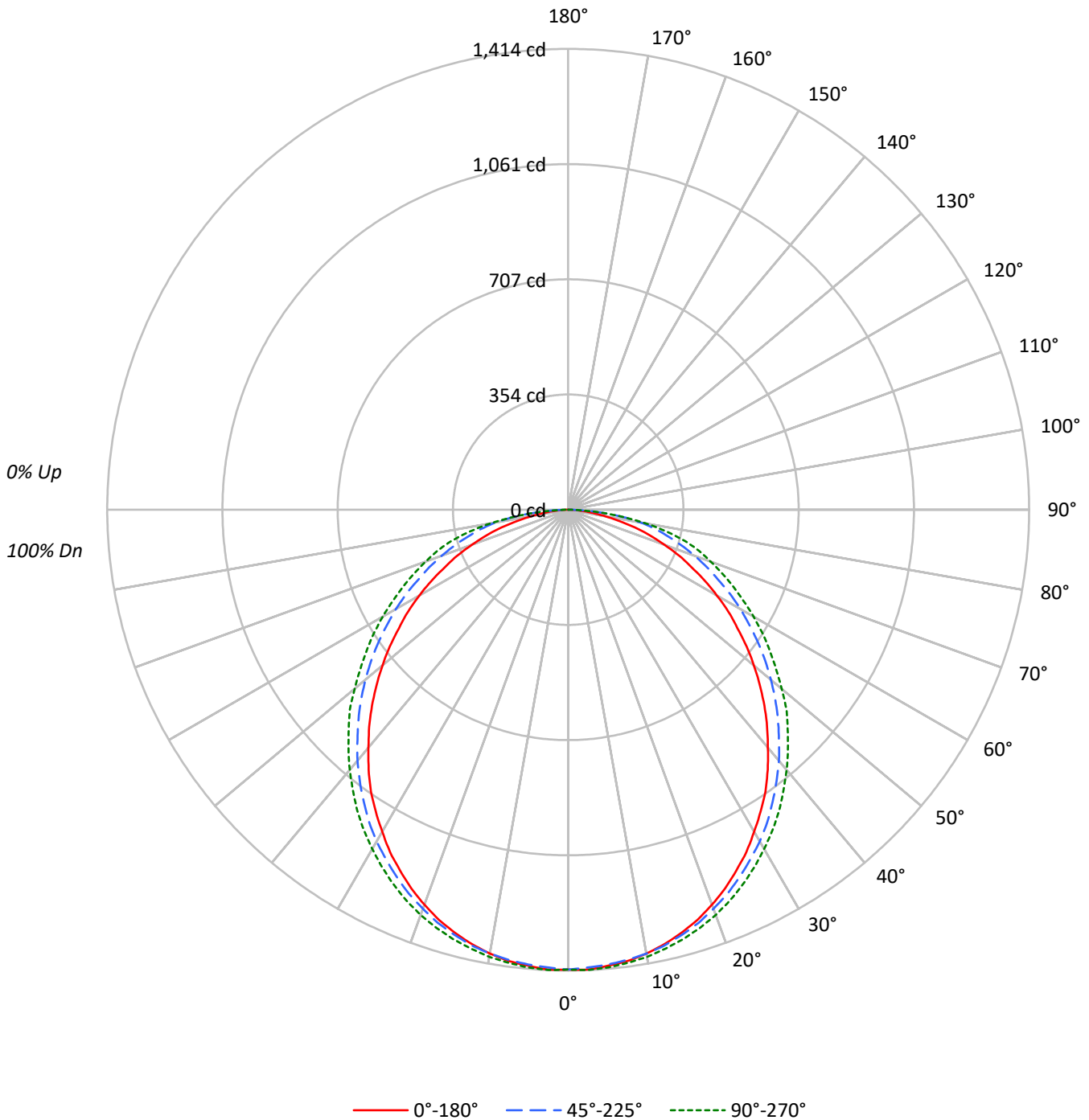
Input Watts (W): 30.783
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1899	1899	1899
5°	1897	1892	1904
10°	1890	1890	1903
15°	1871	1880	1900
20°	1847	1865	1894
25°	1813	1847	1883
30°	1772	1826	1867
35°	1733	1796	1853
40°	1674	1766	1831
45°	1619	1731	1811
50°	1557	1698	1789
55°	1487	1667	1772
60°	1418	1641	1768
65°	1328	1613	1779
70°	1230	1621	1827
75°	1101	1652	1930
80°	890	1750	1888
85°	670	1536	1497



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.6	3.3
10°-20°	381.7	9.5
20°-30°	573.8	14.3
30°-40°	683.5	17.0
40°-50°	699.5	17.4
50°-60°	629.8	15.7
60°-70°	494.6	12.3
70°-80°	321.0	8.0
80°-90°	99.3	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°	1089.1	27.1
0°-40°	1772.6	44.1
0°-60°	3101.9	77.2
0°-90°	4016.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4016.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1411	1411	1411	1411	1411	
5°	1405	1407	1401	1409	1410	133
15°	1344	1347	1350	1361	1364	379
25°	1221	1231	1244	1264	1268	562
35°	1055	1068	1093	1120	1128	658
45°	851	871	910	944	952	656
55°	634	662	711	748	755	568
65°	417	449	506	549	559	415
75°	212	253	318	361	371	224
85°	43	80	100	97	97	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1411.1	1411.1	1411.1	1411.1	1411.1
2.5°	1412.4	1412.4	1406.0	1412.4	1413.7
5°	1404.7	1407.3	1400.9	1408.6	1409.8
7.5°	1397.1	1397.1	1393.2	1400.9	1402.2
10°	1383.0	1384.3	1383.0	1392.0	1393.2
12.5°	1365.2	1367.7	1369.0	1377.9	1379.2
15°	1343.5	1347.3	1349.9	1361.3	1363.9
17.5°	1319.2	1323.1	1329.4	1342.2	1344.8
20°	1289.9	1295.0	1302.7	1319.2	1323.1
22.5°	1258.0	1263.1	1275.9	1291.2	1297.6
25°	1221.0	1231.2	1244.0	1264.4	1268.2
27.5°	1184.0	1192.9	1209.5	1231.2	1236.3
30°	1140.6	1154.7	1175.1	1196.8	1201.9
32.5°	1098.5	1112.6	1136.8	1159.8	1166.1
35°	1055.1	1067.9	1093.4	1120.2	1127.9
37.5°	1005.4	1022.0	1050.0	1076.8	1084.5
40°	953.1	973.5	1005.4	1033.4	1042.4
42.5°	903.3	925.0	956.9	987.5	997.7
45°	851.0	871.4	909.7	944.1	951.8
47.5°	797.4	820.4	861.2	895.7	908.4
50°	743.8	768.1	811.4	847.2	854.8
52.5°	690.2	715.8	761.7	800.0	803.8
55°	634.1	662.2	710.7	747.7	755.3
57.5°	583.1	607.3	659.6	697.9	706.8
60°	526.9	553.7	609.9	645.6	657.1
62.5°	473.3	501.4	560.1	595.8	606.0
65°	417.2	449.1	506.5	548.6	558.8
67.5°	368.7	399.3	460.6	501.4	511.6
70°	312.6	347.0	412.1	454.2	464.4
72.5°	264.1	299.8	364.9	405.7	421.0
75°	211.8	252.6	317.7	361.1	371.3
77.5°	160.8	208.0	274.3	307.5	307.5
80°	114.8	164.6	225.8	241.1	243.7
82.5°	75.3	123.8	167.1	165.9	165.9
85°	43.4	80.4	99.5	97.0	97.0
87.5°	16.6	33.2	35.7	35.7	34.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)