

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: P261029

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261029  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-35SE-S-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3810.0 lumens  
Efficiency: N/A  
Efficacy: 143.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

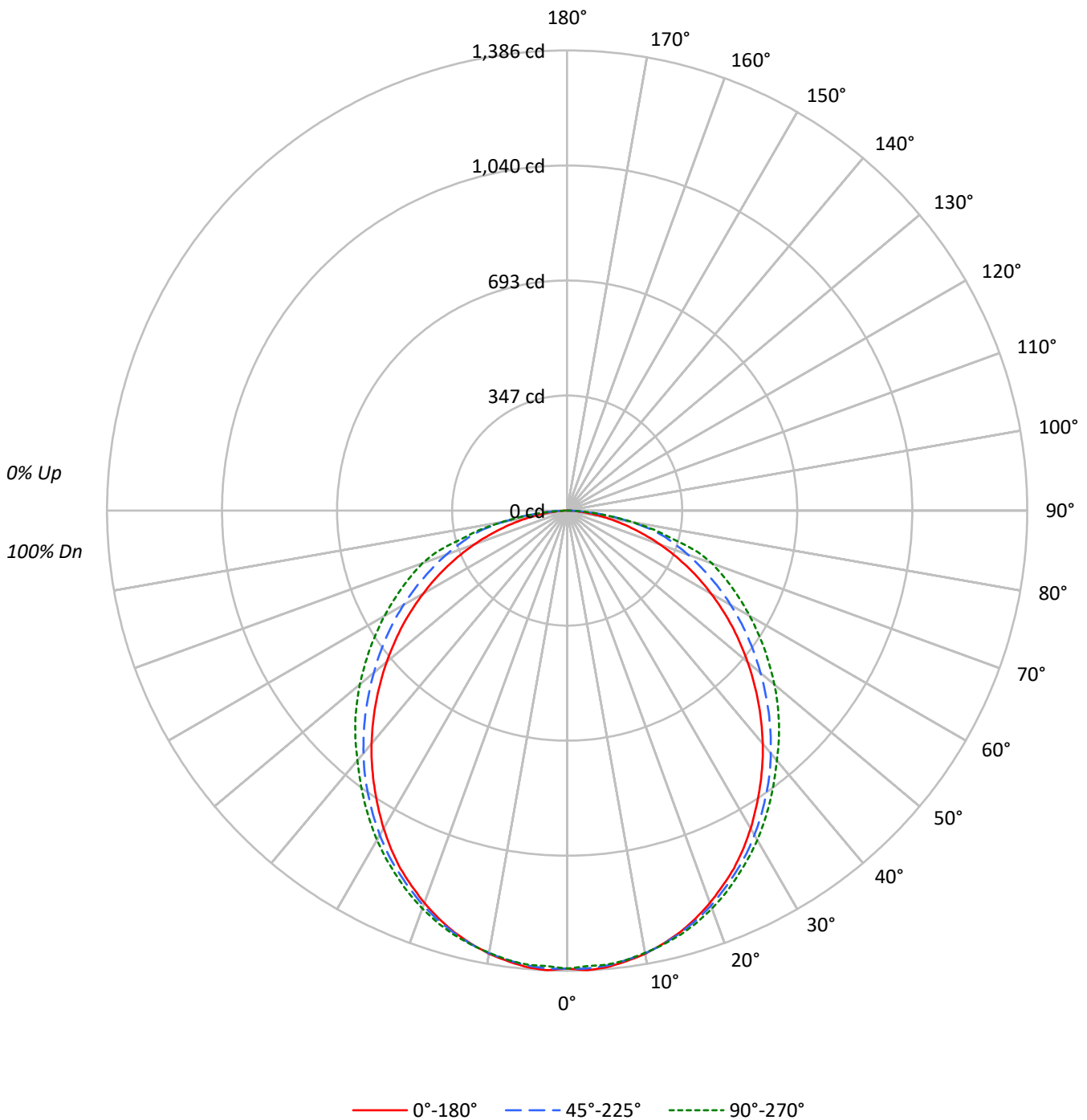
Input Watts (W): 26.63892  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1856	1856	1856
5°	1865	1858	1854
10°	1852	1850	1848
15°	1831	1835	1842
20°	1801	1813	1826
25°	1765	1784	1803
30°	1718	1753	1780
35°	1664	1716	1751
40°	1610	1677	1726
45°	1549	1633	1717
50°	1486	1592	1706
55°	1422	1558	1701
60°	1348	1532	1709
65°	1267	1514	1744
70°	1167	1521	1825
75°	1035	1575	1700
80°	865	1493	1533
85°	645	1193	1096



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.4	3.4
10°-20°	370.9	9.7
20°-30°	552.7	14.5
30°-40°	650.6	17.1
40°-50°	661.2	17.4
50°-60°	594.4	15.6
60°-70°	469.6	12.3
70°-80°	297.9	7.8
80°-90°	82.2	2.2
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°	1054.0	27.7
0°-40°	1704.6	44.7
0°-60°	2960.2	77.7
0°-90°	3810.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3810.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1379	1379	1379	1379	1379	
5°	1381	1369	1376	1373	1373	131
15°	1315	1308	1317	1321	1322	370
25°	1189	1188	1202	1209	1214	547
35°	1013	1019	1045	1056	1066	634
45°	814	825	858	884	903	628
55°	606	621	664	707	725	541
65°	398	418	475	527	548	394
75°	199	233	303	330	327	212
85°	42	72	77	71	71	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1379.3	1379.3	1379.3	1379.3	1379.3
2.5°	1385.6	1375.5	1380.6	1378.0	1373.0
5°	1380.6	1369.1	1375.5	1373.0	1373.0
7.5°	1369.1	1360.3	1365.3	1364.1	1365.3
10°	1355.2	1346.3	1353.9	1353.9	1352.7
12.5°	1336.2	1328.6	1337.5	1337.5	1338.7
15°	1314.6	1308.3	1317.2	1321.0	1322.2
17.5°	1288.0	1281.7	1293.1	1296.9	1300.7
20°	1257.6	1255.1	1266.5	1270.3	1275.3
22.5°	1223.4	1223.4	1234.8	1239.8	1247.4
25°	1189.1	1187.9	1201.8	1209.4	1214.5
27.5°	1148.6	1149.8	1167.6	1175.2	1181.5
30°	1105.5	1108.0	1128.3	1137.2	1146.0
32.5°	1059.8	1064.9	1087.7	1097.9	1106.7
35°	1012.9	1019.3	1044.6	1056.0	1066.2
37.5°	966.0	974.9	1001.5	1012.9	1024.3
40°	916.6	924.2	954.6	968.5	982.5
42.5°	865.9	876.0	906.4	926.7	943.2
45°	813.9	825.3	858.3	883.6	902.6
47.5°	761.9	777.1	808.8	843.0	859.5
50°	709.9	725.1	760.6	798.7	815.2
52.5°	656.7	671.9	712.5	751.8	769.5
55°	606.0	621.2	664.3	707.4	725.1
57.5°	552.7	569.2	617.4	661.8	679.5
60°	500.8	517.2	569.2	616.1	635.1
62.5°	450.0	467.8	522.3	571.7	590.8
65°	398.1	418.4	475.4	527.4	547.7
67.5°	347.4	370.2	429.8	484.3	505.8
70°	296.6	323.3	386.7	442.4	464.0
72.5°	247.2	276.4	343.6	399.3	410.7
75°	199.0	233.3	303.0	329.6	327.1
77.5°	153.4	191.4	257.3	262.4	270.0
80°	111.6	153.4	192.7	202.8	197.8
82.5°	73.5	115.4	138.2	133.1	131.8
85°	41.8	72.3	77.3	71.0	71.0
87.5°	17.7	29.2	25.4	19.0	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)