

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: P390769

Luminaire Tested: **22CZ2-85VHE-RDP-UNV-L935-CD1-SWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P390769  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-85VHE-RDP-UNV-L935-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

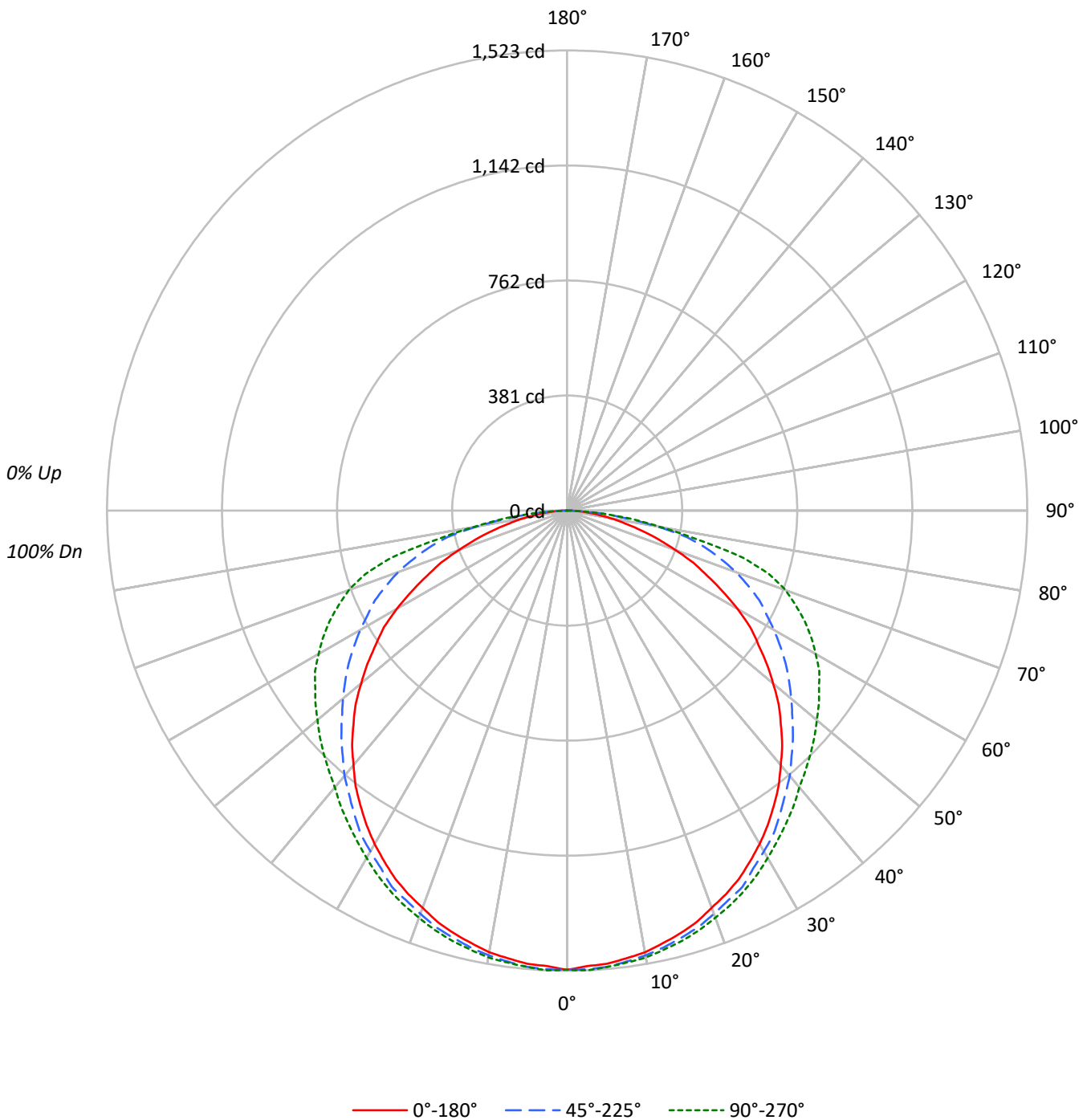
Lumens per Lamp: N/A  
Luminaire Lumens: 4838.1 lumens  
Efficiency: N/A  
Efficacy: 76.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 63.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	4089	4089	4089
5°	4067	4096	4096
10°	4055	4085	4104
15°	4035	4075	4105
20°	4005	4067	4107
25°	3994	4079	4121
30°	3959	4048	4125
35°	3917	4034	4151
40°	3863	4026	4201
45°	3806	4023	4334
50°	3725	4053	4515
55°	3623	4141	4776
60°	3505	4252	5114
65°	3263	4464	5529
70°	2996	4677	6049
75°	2627	4922	6254
80°	2261	4688	4909
85°	1979	3406	3736



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.8	3.0
10°-20°	412.8	8.5
20°-30°	629.7	13.0
30°-40°	768.9	15.9
40°-50°	822.1	17.0
50°-60°	793.6	16.4
60°-70°	683.1	14.1
70°-80°	462.2	9.6
80°-90°	121.9	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°	1186.2	24.5
0°-40°	1955.2	40.4
0°-60°	3570.9	73.8
0°-90°	4838.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4838.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1520	1520	1520	1520	1520	
5°	1506	1509	1516	1516	1516	143
15°	1448	1452	1463	1470	1474	409
25°	1345	1352	1374	1381	1388	619
35°	1192	1203	1228	1253	1264	746
45°	1000	1018	1057	1110	1139	772
55°	772	797	883	972	1018	692
65°	512	562	701	812	868	510
75°	253	335	473	570	602	271
85°	64	89	110	114	121	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1519.7	1519.7	1519.7	1519.7	1519.7
2.5°	1509.1	1512.6	1519.7	1519.7	1523.3
5°	1505.5	1509.1	1516.2	1516.2	1516.2
7.5°	1494.8	1498.4	1505.5	1509.1	1509.1
10°	1484.1	1487.7	1494.8	1498.4	1501.9
12.5°	1466.3	1469.9	1480.6	1487.7	1487.7
15°	1448.5	1452.1	1462.8	1469.9	1473.5
17.5°	1427.2	1434.3	1445.0	1452.1	1455.7
20°	1398.7	1405.8	1420.1	1430.8	1434.3
22.5°	1373.8	1380.9	1395.2	1405.8	1413.0
25°	1345.3	1352.5	1373.8	1380.9	1388.0
27.5°	1309.7	1316.9	1334.7	1348.9	1359.6
30°	1274.2	1281.3	1302.6	1320.4	1327.5
32.5°	1235.0	1245.7	1270.6	1284.8	1295.5
35°	1192.3	1203.0	1227.9	1252.8	1263.5
37.5°	1149.6	1160.3	1185.2	1217.2	1231.4
40°	1099.8	1114.0	1146.0	1188.7	1195.9
42.5°	1053.5	1071.3	1099.8	1149.6	1167.4
45°	1000.1	1017.9	1057.0	1110.4	1138.9
47.5°	950.3	968.1	1010.8	1074.8	1110.4
50°	889.8	914.7	968.1	1042.8	1078.4
52.5°	832.8	854.2	925.4	1007.2	1049.9
55°	772.3	797.2	882.7	971.6	1017.9
57.5°	718.9	740.3	836.4	936.0	989.4
60°	651.3	679.8	790.1	896.9	950.3
62.5°	580.1	622.8	743.8	854.2	911.1
65°	512.5	562.3	701.1	811.5	868.4
67.5°	452.0	505.4	647.8	765.2	818.6
70°	380.8	448.4	594.4	708.3	768.8
72.5°	316.8	391.5	533.9	647.8	701.1
75°	252.7	334.6	473.4	569.5	601.5
77.5°	195.7	274.0	405.7	434.2	437.8
80°	145.9	217.1	302.5	306.1	316.8
82.5°	99.7	153.0	195.7	213.5	217.1
85°	64.1	89.0	110.3	113.9	121.0
87.5°	28.5	32.0	39.1	35.6	35.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)