

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: P230449

Luminaire Tested: **24CZ-LD5-55SE-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230449  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-55SE-SQP-UNV-L935-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH SQP LENS  
Light Source: (84) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3295.8 lumens  
Efficiency: N/A  
Efficacy: 60.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

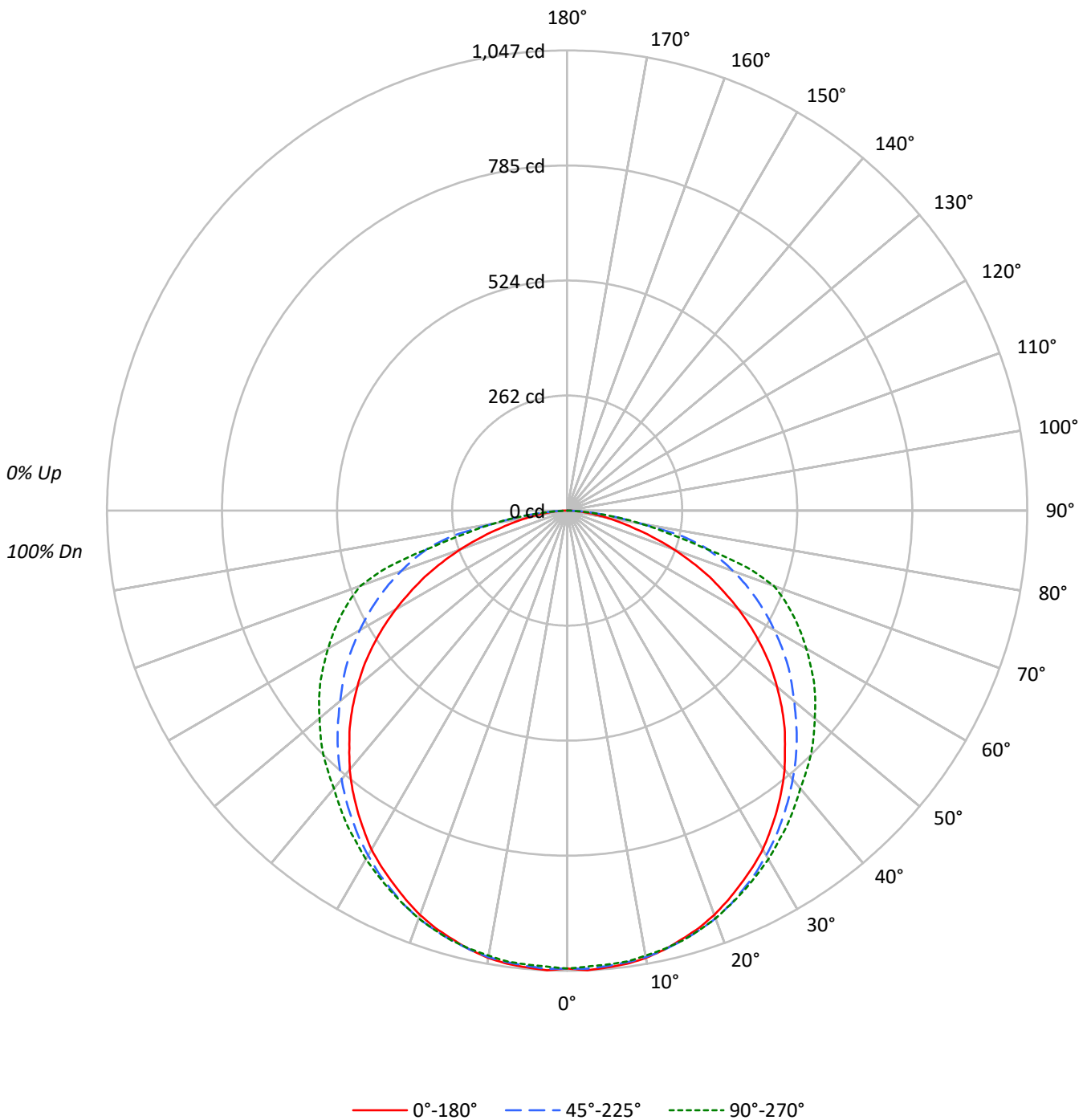
Input Watts (W): 54.69  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	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	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	1402	1402	1402
5°	1410	1405	1400
10°	1412	1410	1405
15°	1406	1411	1411
20°	1402	1414	1414
25°	1390	1410	1415
30°	1383	1407	1423
35°	1367	1404	1434
40°	1352	1402	1450
45°	1331	1406	1493
50°	1304	1411	1539
55°	1270	1438	1609
60°	1214	1466	1690
65°	1138	1512	1810
70°	1018	1581	1969
75°	841	1691	1628
80°	686	1306	1319
85°	553	868	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.0	3.0
10°-20°	285.5	8.7
20°-30°	436.4	13.2
30°-40°	533.7	16.2
40°-50°	571.1	17.3
50°-60°	546.8	16.6
60°-70°	462.6	14.0
70°-80°	293.2	8.9
80°-90°	67.5	2.0
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°	820.9	24.9
0°-40°	1354.6	41.1
0°-60°	2472.5	75.0
0°-90°	3295.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3295.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1042	1042	1042	1042	1042	
5°	1044	1038	1040	1038	1037	99
15°	1010	1008	1013	1013	1013	285
25°	936	936	950	953	953	432
35°	832	838	855	866	873	521
45°	700	712	739	770	785	539
55°	541	558	613	664	686	483
65°	358	392	475	540	569	352
75°	162	228	325	324	313	176
85°	36	54	56	51	53	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1041.9	1041.9	1041.9	1041.9	1041.9
2.5°	1047.0	1041.9	1043.6	1041.9	1038.5
5°	1043.6	1038.5	1040.2	1038.5	1036.8
7.5°	1040.2	1035.1	1036.8	1035.1	1035.1
10°	1033.4	1028.2	1031.7	1029.9	1028.2
12.5°	1023.1	1019.7	1023.1	1021.4	1021.4
15°	1009.5	1007.8	1012.9	1012.9	1012.9
17.5°	995.9	994.2	1001.0	1001.0	1001.0
20°	978.9	977.2	987.4	987.4	987.4
22.5°	958.4	956.7	970.4	970.4	970.4
25°	936.3	936.3	949.9	953.3	953.3
27.5°	914.2	914.2	929.5	934.6	934.6
30°	890.4	890.4	905.7	912.5	915.9
32.5°	861.4	864.8	881.8	890.4	893.8
35°	832.5	837.6	854.6	866.5	873.3
37.5°	801.8	806.9	827.4	841.0	849.5
40°	769.5	776.3	798.4	815.4	825.7
42.5°	733.7	743.9	769.5	791.6	805.2
45°	699.7	711.6	738.8	769.5	784.8
47.5°	662.2	675.9	706.5	745.6	761.0
50°	623.1	636.7	674.1	718.4	735.4
52.5°	583.9	599.2	643.5	691.2	711.6
55°	541.4	558.4	612.9	663.9	686.1
57.5°	497.1	517.5	578.8	633.3	657.1
60°	451.1	476.7	544.8	602.6	628.2
62.5°	403.5	434.1	510.7	572.0	599.2
65°	357.5	391.6	475.0	539.7	568.6
67.5°	308.1	350.7	439.2	509.0	536.3
70°	258.8	308.1	401.8	473.3	500.5
72.5°	209.4	269.0	364.3	429.0	429.0
75°	161.7	228.1	325.2	323.5	313.2
77.5°	122.6	190.7	267.3	228.1	229.8
80°	88.5	153.2	168.5	168.5	170.2
82.5°	59.6	117.5	109.0	107.3	110.7
85°	35.8	54.5	56.2	51.1	52.8
87.5°	17.0	18.7	15.3	10.2	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)