

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: P390720

Luminaire Tested: **22CZ2-80VHE-RDP-UNV-L935-CD1-SDWPD1-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: P390720
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: 22CZ2-80VHE-RDP-UNV-L935-CD1-SDWPD1-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: 4489.5 lumens
Efficiency: N/A
Efficacy: 76.0 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

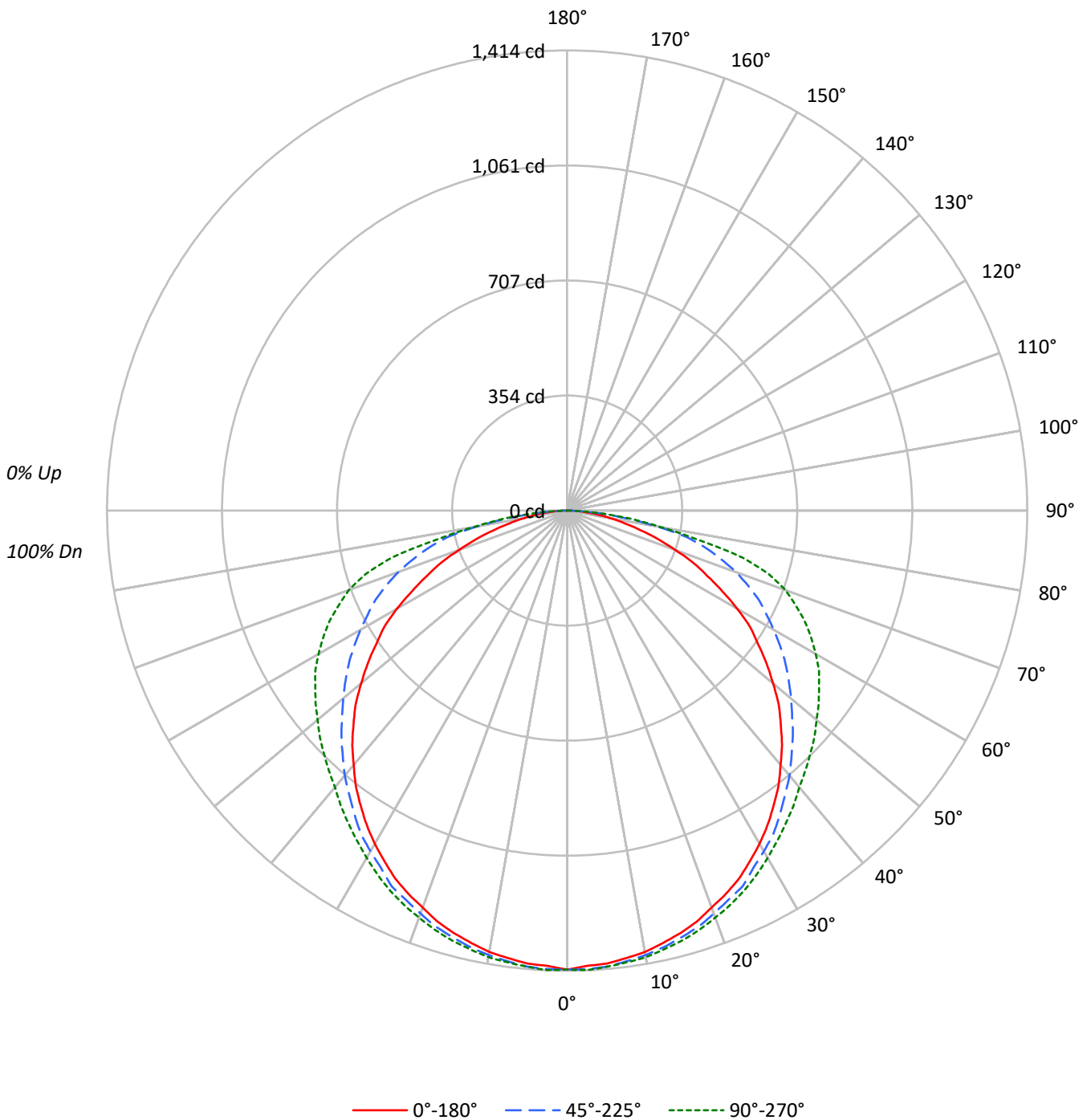
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3795	3795	3795
5°	3774	3800	3800
10°	3763	3790	3808
15°	3745	3782	3809
20°	3717	3774	3812
25°	3707	3785	3824
30°	3674	3756	3828
35°	3635	3743	3851
40°	3585	3736	3898
45°	3532	3733	4022
50°	3457	3761	4189
55°	3362	3843	4432
60°	3253	3946	4746
65°	3028	4143	5131
70°	2781	4339	5613
75°	2438	4567	5803
80°	2098	4350	4554
85°	1834	3162	3467



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.4	3.0
10°-20°	383.0	8.5
20°-30°	584.4	13.0
30°-40°	713.5	15.9
40°-50°	762.9	17.0
50°-60°	736.4	16.4
60°-70°	633.9	14.1
70°-80°	428.9	9.6
80°-90°	113.2	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°	1100.8	24.5
0°-40°	1814.3	40.4
0°-60°	3313.6	73.8
0°-90°	4489.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4489.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1410	1410	1410	1410	1410	
5°	1397	1400	1407	1407	1407	133
15°	1344	1348	1357	1364	1367	379
25°	1248	1255	1275	1281	1288	575
35°	1106	1116	1139	1162	1172	692
45°	928	945	981	1030	1057	716
55°	717	740	819	902	945	642
65°	476	522	651	753	806	473
75°	234	310	439	528	558	252
85°	59	83	102	106	112	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1410.2	1410.2	1410.2	1410.2	1410.2
2.5°	1400.3	1403.6	1410.2	1410.2	1413.5
5°	1397.0	1400.3	1406.9	1406.9	1406.9
7.5°	1387.1	1390.4	1397.0	1400.3	1400.3
10°	1377.2	1380.5	1387.1	1390.4	1393.7
12.5°	1360.7	1364.0	1373.9	1380.5	1380.5
15°	1344.2	1347.5	1357.4	1364.0	1367.3
17.5°	1324.4	1331.0	1340.9	1347.5	1350.8
20°	1297.9	1304.5	1317.8	1327.7	1331.0
22.5°	1274.8	1281.4	1294.6	1304.5	1311.2
25°	1248.4	1255.0	1274.8	1281.4	1288.0
27.5°	1215.4	1222.0	1238.5	1251.7	1261.6
30°	1182.3	1189.0	1208.8	1225.3	1231.9
32.5°	1146.0	1155.9	1179.0	1192.3	1202.2
35°	1106.4	1116.3	1139.4	1162.5	1172.4
37.5°	1066.8	1076.7	1099.8	1129.5	1142.7
40°	1020.5	1033.7	1063.5	1103.1	1109.7
42.5°	977.6	994.1	1020.5	1066.8	1083.3
45°	928.0	944.6	980.9	1030.4	1056.8
47.5°	881.8	898.3	938.0	997.4	1030.4
50°	825.7	848.8	898.3	967.7	1000.7
52.5°	772.8	792.6	858.7	934.6	974.3
55°	716.7	739.8	819.1	901.6	944.6
57.5°	667.1	687.0	776.1	868.6	918.1
60°	604.4	630.8	733.2	832.3	881.8
62.5°	538.3	578.0	690.3	792.6	845.5
65°	475.6	521.8	650.6	753.0	805.8
67.5°	419.4	469.0	601.1	710.1	759.6
70°	353.4	416.1	551.5	657.2	713.4
72.5°	293.9	363.3	495.4	601.1	650.6
75°	234.5	310.4	439.3	528.4	558.1
77.5°	181.6	254.3	376.5	402.9	406.2
80°	135.4	201.5	280.7	284.0	293.9
82.5°	92.5	142.0	181.6	198.2	201.5
85°	59.4	82.6	102.4	105.7	112.3
87.5°	26.4	29.7	36.3	33.0	33.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)