

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: P388757

Luminaire Tested: **24CZ2-30VHE-UNV-L940-CD1-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: P388757
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30VHE-UNV-L940-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

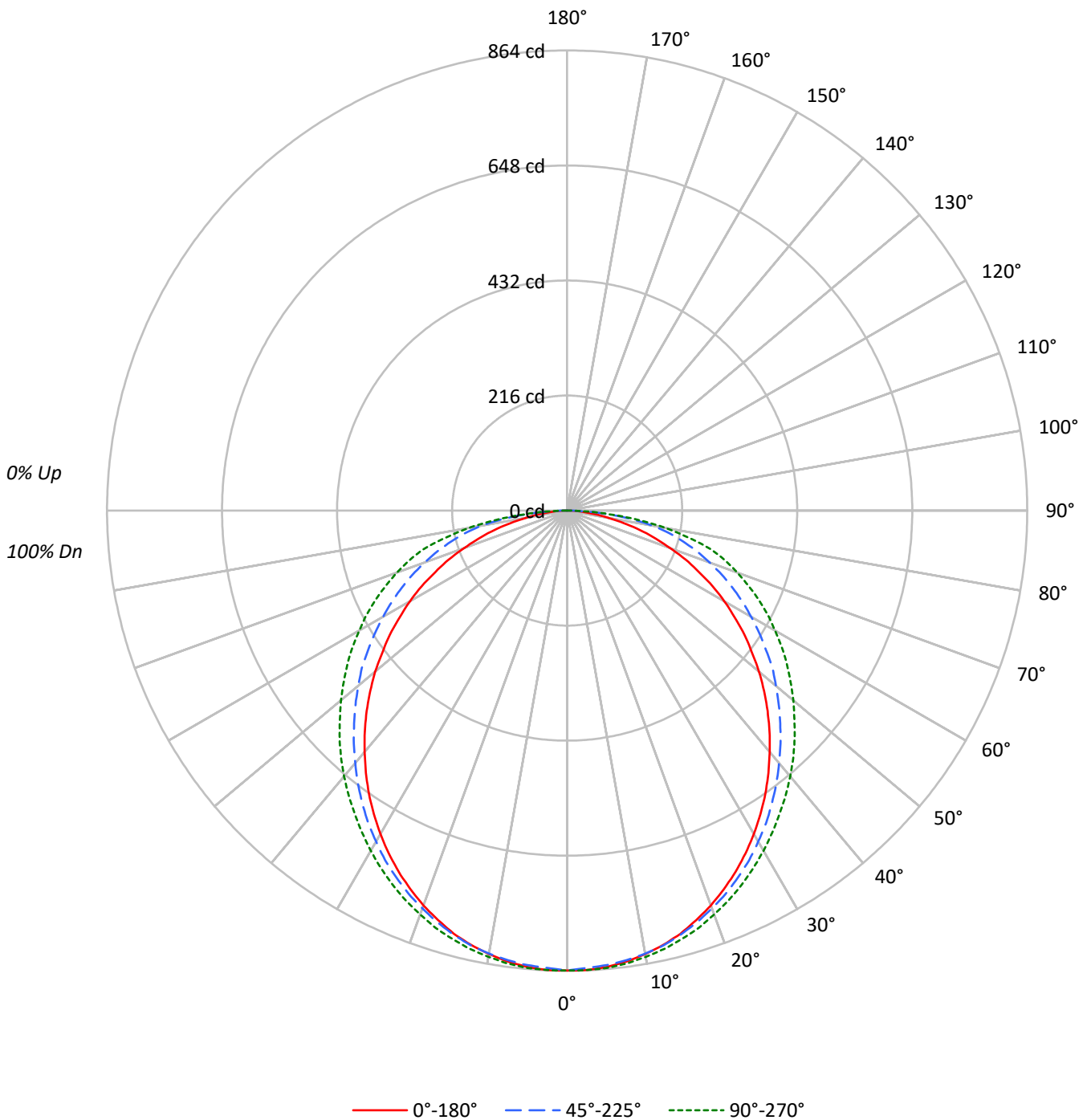
Lumens per Lamp: N/A
Luminaire Lumens: 2572.1 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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	93	89		92	89	87		89	86	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	61		70	64	60		68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1162	1162	1162
5°	1162	1157	1164
10°	1155	1154	1162
15°	1146	1148	1160
20°	1130	1138	1155
25°	1111	1128	1151
30°	1090	1115	1146
35°	1066	1101	1142
40°	1039	1087	1144
45°	1013	1076	1150
50°	985	1071	1161
55°	955	1069	1182
60°	917	1074	1213
65°	869	1090	1265
70°	807	1118	1337
75°	736	1174	1450
80°	605	1264	1450
85°	463	1166	1246



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	3.2
10°-20°	233.2	9.1
20°-30°	350.9	13.6
30°-40°	420.5	16.3
40°-50°	438.2	17.0
50°-60°	407.7	15.9
60°-70°	335.8	13.1
70°-80°	228.7	8.9
80°-90°	75.5	2.9
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°	665.7	25.9
0°-40°	1086.2	42.2
0°-60°	1932.1	75.1
0°-90°	2572.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2572.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	860	860	857	861	862	82
15°	822	823	824	832	833	232
25°	748	752	760	773	775	345
35°	649	657	670	688	695	406
45°	532	543	566	594	604	410
55°	407	421	456	492	504	363
65°	273	296	342	383	397	271
75°	142	173	226	266	279	149
85°	30	58	76	81	81	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	863.6	863.6	863.6	863.6	863.6
2.5°	863.6	863.6	859.3	863.6	863.6
5°	860.1	860.1	856.7	861.0	861.9
7.5°	854.1	855.0	851.6	856.7	857.6
10°	845.5	846.4	844.7	849.8	850.7
12.5°	835.2	836.1	836.1	842.1	843.0
15°	822.4	823.2	824.1	831.8	832.7
17.5°	806.1	808.6	810.4	819.8	821.5
20°	788.9	791.5	794.9	805.2	806.9
22.5°	769.1	772.6	778.6	789.7	792.3
25°	748.5	752.0	759.7	772.6	775.2
27.5°	725.4	730.5	740.0	753.7	757.1
30°	701.3	706.5	717.6	732.2	737.4
32.5°	675.6	682.4	695.3	711.6	716.8
35°	649.0	656.7	670.4	688.5	695.3
37.5°	620.6	629.2	645.5	665.3	673.9
40°	591.5	601.8	618.9	642.1	651.5
42.5°	562.3	571.7	593.2	618.1	628.4
45°	532.2	543.4	565.7	594.0	604.3
47.5°	501.3	512.5	539.1	569.1	578.6
50°	470.4	481.6	511.6	543.4	554.5
52.5°	436.9	451.5	485.9	517.6	528.8
55°	406.9	420.6	455.8	491.9	503.9
57.5°	372.6	388.9	427.5	465.3	478.1
60°	340.8	358.0	399.2	437.8	450.7
62.5°	308.2	327.1	370.8	410.3	424.9
65°	273.0	296.2	342.5	382.9	397.4
67.5°	241.2	265.3	314.2	355.4	368.3
70°	205.2	234.3	284.1	325.3	339.9
72.5°	174.3	203.4	255.8	296.2	310.7
75°	141.6	173.4	225.8	266.1	279.0
77.5°	109.0	144.2	196.6	227.5	231.8
80°	78.1	115.0	163.1	181.1	187.1
82.5°	54.9	88.4	120.2	132.2	135.6
85°	30.0	58.4	75.5	80.7	80.7
87.5°	12.9	24.9	30.0	30.9	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)