

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: FAIL-SAFE

Report Number: 7298.1

Luminaire Tested: **MEX-450BX**

Issue Date: 3/3/2020

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: 7298.1
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MEX-450BX
Description: FAIL-SAFE MEX (WAS NEO-RAY 3EX)
Light Source: 4/50W BIAx 4000 LUMENS
F50BX/SPX35
Ballast/Driver: -

Luminaire Equipment:	<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
	AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
	AS-5443-2	Good	REFLECTOR
	AS-5443-3	Good	DRIVER
	AS-5443-4	Good	UPPER MODULE
	AS-5443-5	Good	LENS
	AS-5443-6	Good	DRIVER 2
	AS-5443-7	Good	TRIM RING

Summary

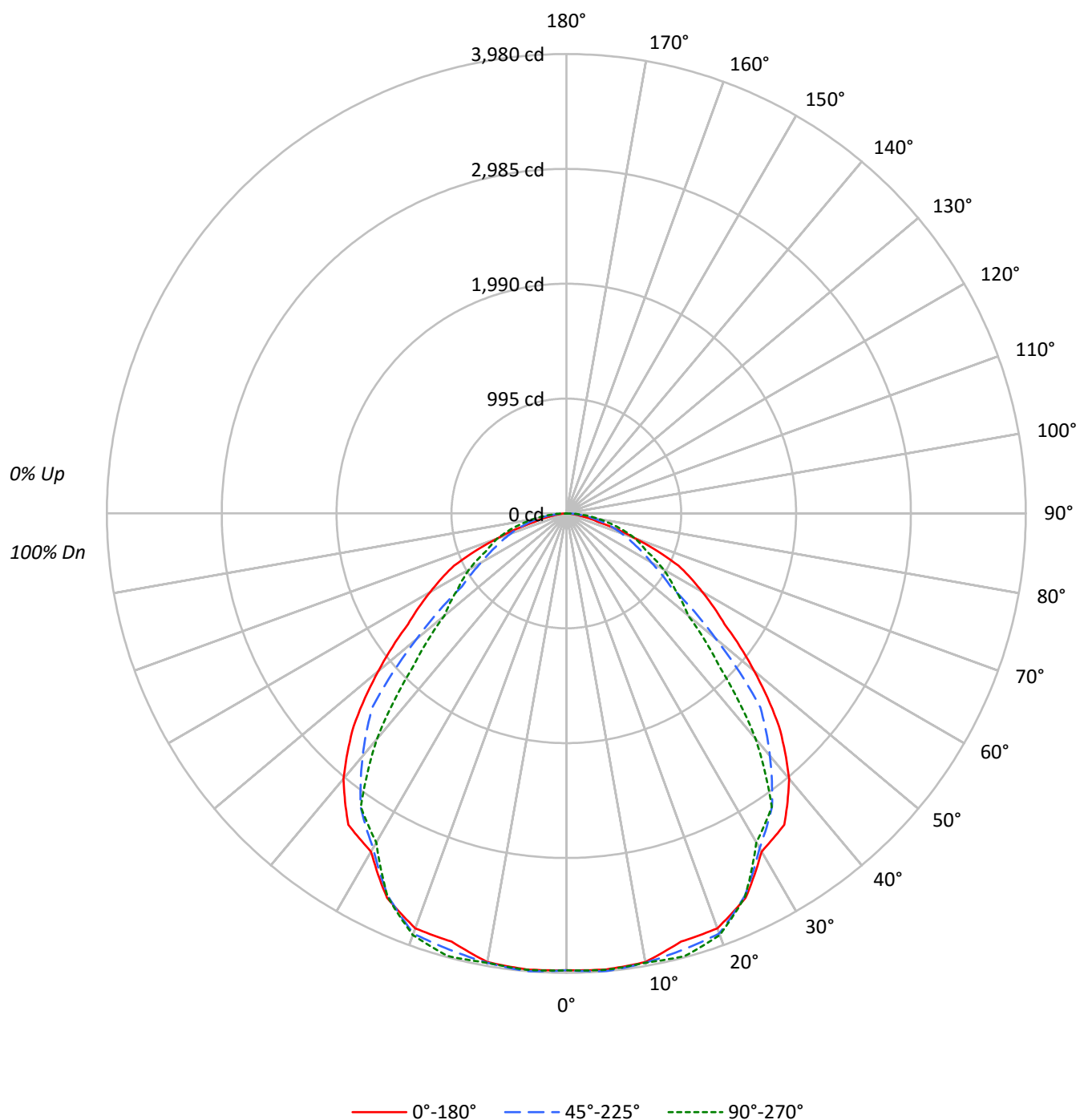
Lumens per Lamp: 4000 (4 lamps)
Luminaire Lumens: 9270.5 lumens
Efficiency: 57.9%
Efficacy: 48.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.24 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 192
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	69	69	69	69	67	67	67	67	64	64	64	62	62	62	59	59	59
1	64	61	59	57	62	60	58	56	58	56	54	55	54	53	53	52	51
2	59	54	51	48	57	53	50	47	51	49	46	49	47	45	48	46	44
3	54	48	44	41	53	48	44	40	46	42	40	44	41	39	43	40	38
4	50	43	39	35	49	43	38	35	41	37	34	40	37	34	39	36	34
5	46	39	34	31	45	39	34	31	37	33	30	36	33	30	35	32	30
6	43	36	31	27	42	35	30	27	34	30	27	33	29	27	32	29	26
7	40	32	28	24	39	32	27	24	31	27	24	30	27	24	30	26	24
8	37	30	25	22	36	29	25	22	29	25	22	28	24	22	27	24	21
9	35	27	23	20	34	27	23	20	26	22	20	26	22	20	25	22	19
10	33	25	21	18	32	25	21	18	24	21	18	24	20	18	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12722	12722	12722
5°	12793	12841	12806
10°	12879	12898	12898
15°	12778	13017	13207
20°	13083	13247	13295
25°	13030	12966	12991
30°	12556	12426	12218
35°	12917	12187	12175
40°	12600	11517	10720
45°	11841	10805	8536
50°	10621	8466	6900
55°	9381	6181	6461
60°	8743	5477	6261
65°	8161	5065	5810
70°	6052	4821	5958
75°	3564	4607	5787
80°	2295	4368	5497
85°	1918	3835	5089



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	378.2	4.1	2.4
10°-20°	1105.6	11.9	6.9
20°-30°	1673.6	18.1	10.5
30°-40°	1937.3	20.9	12.1
40°-50°	1733.2	18.7	10.8
50°-60°	1179.1	12.7	7.4
60°-70°	754.6	8.1	4.7
70°-80°	396.3	4.3	2.5
80°-90°	112.7	1.2	0.7
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	3157.3	34.1	19.7
0°-40°	5094.6	55.0	31.8
0°-60°	8006.9	86.4	50.0
0°-90°	9270.5	100.0	57.9
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	9270.5	100.0	57.9

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3958	3958	3958	3958	3958	
5°	3965	3958	3980	3991	3969	378
15°	3840	3853	3912	3909	3969	1094
25°	3674	3647	3656	3639	3663	1680
35°	3292	3210	3106	3071	3103	2033
45°	2605	2419	2377	2052	1878	1994
55°	1674	1545	1103	1106	1153	1527
65°	1073	690	666	750	764	1026
75°	287	295	371	426	466	353
85°	52	68	104	122	138	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3958	3958	3958	3958	3958
5°	3965	3958	3980	3991	3969
10°	3946	3927	3952	3963	3952
15°	3840	3853	3912	3909	3969
20°	3825	3912	3873	3860	3887
25°	3674	3647	3656	3639	3663
30°	3383	3358	3348	3288	3292
35°	3292	3210	3106	3071	3103
40°	3003	2843	2745	2620	2555
45°	2605	2419	2377	2052	1878
50°	2124	2005	1693	1374	1380
55°	1674	1545	1103	1106	1153
60°	1360	988	852	949	974
65°	1073	690	666	750	764
70°	644	474	513	569	634
75°	287	295	371	426	466
80°	124	158	236	273	297
85°	52	68	104	122	138
90°	0	0	0	0	0

(END OF REPORT)