

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: 8298.2

Luminaire Tested: **MPR (INDIRECT AMBIENT LIGHT - 240 BX)**

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: 8298.2
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MPR (INDIRECT AMBIENT LIGHT - 240 BX)
Description: FAIL-SAFE PERFORATED METAL WINGS w/ OVERLAY (WAS NEO-RAY 3 PR)
Light Source: 2/40W BIAx 3150 LUMENS
WATTS=88
F40BX/SPX35/RS
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: 3150 (2 lamps)
Luminaire Lumens: 3041.5 lumens
Efficiency: 48.3%
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.88' x L: 1.92' x H: 0')
CIE Type: Direct

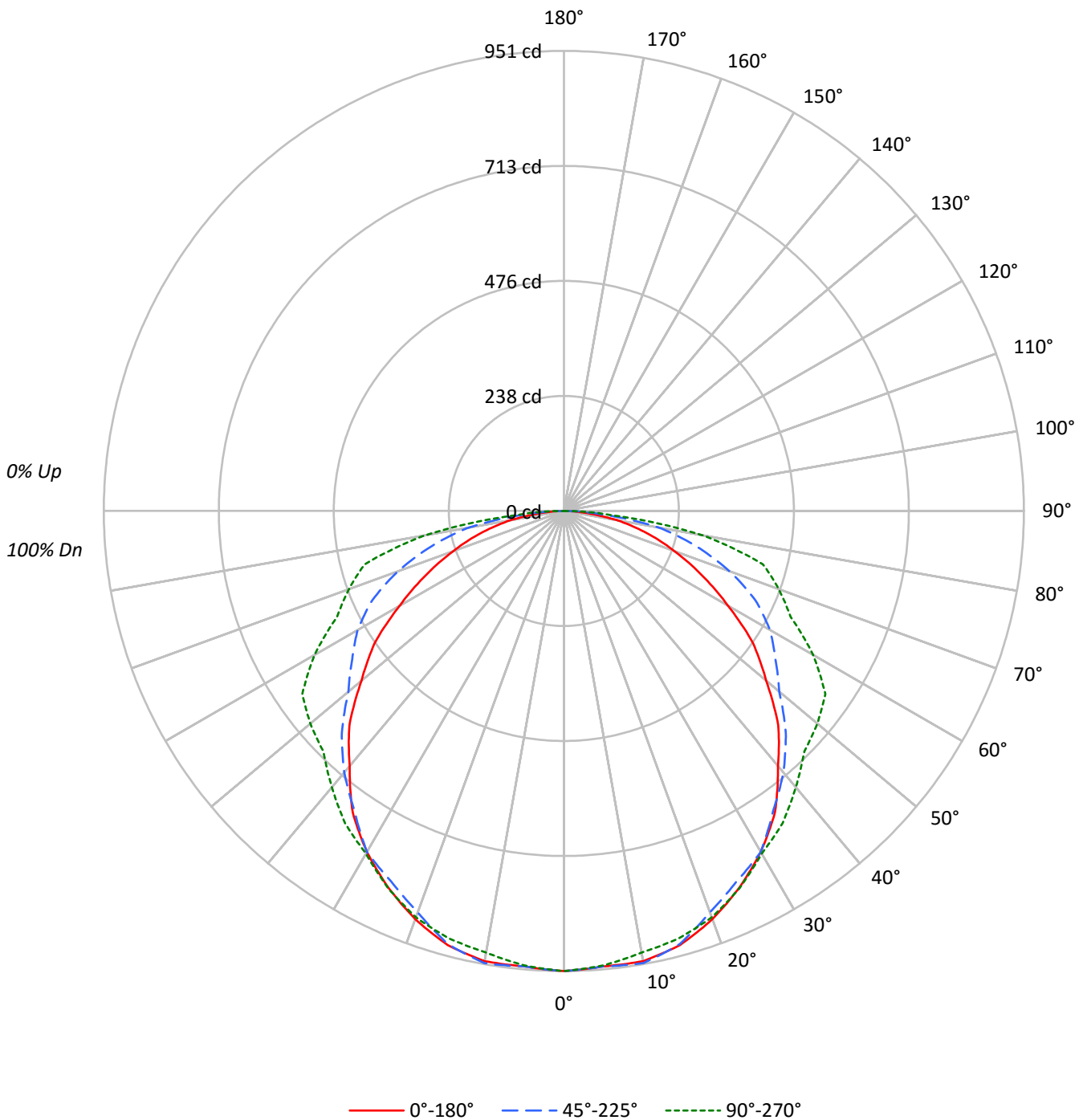
Input Watts (W): 88
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	57	57	57	57	56	56	56	56	54	54	54	51	51	51	49	49	49	48				48
1	52	49	47	45	51	48	46	44	46	44	43	44	43	41	42	41	40	39				39
2	47	42	39	36	46	42	38	35	40	37	35	38	36	34	37	35	33	32				32
3	42	37	33	29	41	36	32	29	35	31	29	33	31	28	32	30	28	26				26
4	39	33	28	25	38	32	28	24	31	27	24	30	26	24	28	26	23	22				22
5	36	29	24	21	34	28	24	21	27	24	21	26	23	20	26	23	20	19				19
6	33	26	22	18	32	26	21	18	25	21	18	24	20	18	23	20	18	17				17
7	30	24	19	16	29	23	19	16	22	19	16	22	18	16	21	18	16	15				15
8	28	21	17	14	27	21	17	14	20	17	14	20	17	14	19	16	14	13				13
9	26	20	16	13	26	19	15	13	19	15	13	18	15	13	18	15	13	12				12
10	25	18	14	12	24	18	14	12	17	14	12	17	14	11	16	14	11	11				11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2833	2833	2833
5°	2826	2826	2820
10°	2858	2870	2804
15°	2865	2859	2822
20°	2847	2799	2834
25°	2823	2777	2827
30°	2800	2800	2814
35°	2767	2745	2865
40°	2679	2745	2901
45°	2641	2734	2961
50°	2530	2692	3170
55°	2482	2773	3428
60°	2335	2931	3545
65°	2220	3080	3644
70°	2125	3179	4120
75°	2049	3269	4903
80°	1938	3448	5043
85°	1435	2563	3384



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	90.3	3.0	1.4	0°	951	951	951	951	951	
10°-20°	260.1	8.6	4.1	5°	945	954	945	946	943	90
20°-30°	394.5	13.0	6.3	15°	929	932	927	912	915	262
30°-40°	480.3	15.8	7.6	25°	859	853	845	861	860	396
40°-50°	506.3	16.6	8.0	35°	761	760	755	775	788	474
50°-60°	492.7	16.2	7.8	45°	627	617	649	678	703	481
60°-70°	419.6	13.8	6.7	55°	478	484	534	625	660	424
70°-80°	302.4	9.9	4.8	65°	315	337	437	494	517	313
80°-90°	95.4	3.1	1.5	75°	178	207	284	373	426	188
90°-100°	0.0	0.0	0.0	85°	42	49	75	99	99	54
100°-110°	0.0	0.0	0.0	90°	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°	744.9	24.5	11.8							
0°-40°	1225.2	40.3	19.4							
0°-60°	2224.2	73.1	35.3							
0°-90°	3041.5	100.0	48.3							
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°	3041.5	100.0	48.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	951	951	951	951	951
5°	945	954	945	946	943
10°	945	946	949	939	927
15°	929	932	927	912	915
20°	898	887	883	891	894
25°	859	853	845	861	860
30°	814	817	814	823	818
35°	761	760	755	775	788
40°	689	702	706	735	746
45°	627	617	649	678	703
50°	546	553	581	653	684
55°	478	484	534	625	660
60°	392	412	492	576	595
65°	315	337	437	494	517
70°	244	272	365	437	473
75°	178	207	284	373	426
80°	113	131	201	280	294
85°	42	49	75	99	99
90°	0	0	0	0	0

(END OF REPORT)