

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: 10365.0

Luminaire Tested: **RPS-12100MHDTBK**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: 10365.0  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: RPS-12100MHDTBK  
Description: FAIL-SAFE "PALADIN" SERIES 12"DIA WALLMOUNT  
WHITE FLAT REFLECTOR w/FROSTED GLASS PRISMATIC LENS  
BLACK PROTOTYPE LENS SHIELDING  
Light Source: 1/100W CLEAR ED17 MH  
M90 M100/U  
Ballast/Driver: -

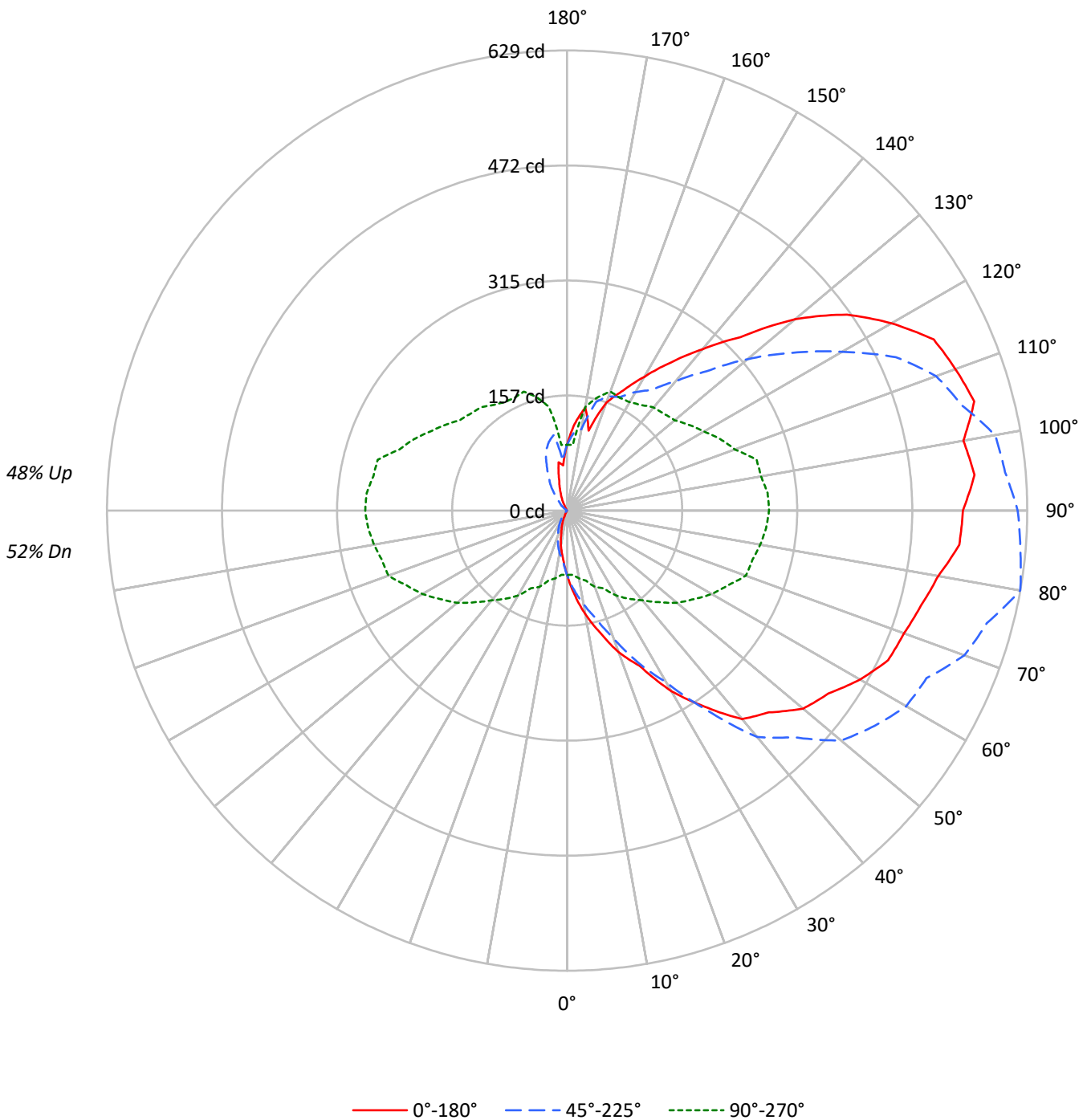
**Summary**

Lumens per Lamp: 8500 (1 lamp)  
Luminaire Lumens: 2745.9 lumens  
Efficiency: 32.3%  
Efficacy: 27.5 lumens/watt  
Spacing Criteria (0/90/45): 2.75 / 2.68 / 2.96  
Luminous Opening: Rectangular w/ Sides (W: 0.79' x L: 0.21' x H: 0.79')  
CIE Type: General Diffuse

Input Watts (W): 100  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	50	30	10	50	30	10	0																
RCR																																														
0	35	35	35	35	32	32	32	32	27	27	27	23	23	23	19	19	19	17	17	17	17	17	17	17	17	17	17	17	17	17																
1	30	28	26	24	27	25	24	22	21	20	19	17	16	15	14	13	12	10	10	10	10	10	10	10	10	10	10	10	10	10																
2	26	23	20	18	24	21	19	17	17	16	14	14	13	11	11	10	9	7	7	7	7	7	7	7	7	7	7	7	7	7																
3	24	20	17	14	22	18	15	13	15	13	11	12	10	9	9	8	7	5	5	5	5	5	5	5	5	5	5	5	5	5																
4	21	17	14	12	19	16	13	11	13	11	9	10	8	7	8	6	5	3	3	3	3	3	3	3	3	3	3	3	3	3																
5	20	15	12	10	18	14	11	9	11	9	7	9	7	6	7	5	4	2	2	2	2	2	2	2	2	2	2	2	2	2																
6	18	13	10	8	16	12	9	7	10	8	6	8	6	5	6	5	4	1	1	1	1	1	1	1	1	1	1	1	1	1																
7	16	12	9	7	15	11	8	6	9	7	5	7	5	4	5	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0																
8	15	11	8	6	14	10	7	5	8	6	4	6	5	4	5	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0																
9	14	10	7	5	13	9	6	5	7	5	4	6	4	3	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0																
10	13	9	6	5	12	8	6	4	7	5	3	5	4	3	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0																

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

	0°	90°	180°
0°	5750	5750	5750
5°	5658	5308	3198
10°	5716	5302	1945
15°	5759	5282	1005
20°	6004	5659	583
25°	6078	5753	208
30°	6723	6410	0
35°	7115	6897	0
40°	7564	7421	0
45°	7496	8178	0
50°	7728	9090	0
55°	7715	9899	0
60°	7949	10906	0
65°	8164	11899	0
70°	8167	13255	0
75°	8315	13978	0
80°	8577	15116	0
85°	9059	16466	0



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	8.6	0.3	0.1	0°	88	88	88	88	88	
10°-20°	29.1	1.1	0.3	5°	115	109	88	68	65	12
20°-30°	58.2	2.1	0.7	15°	172	153	99	48	30	50
30°-40°	104.4	3.8	1.2	25°	234	229	117	28	8	112
40°-50°	160.1	5.8	1.9	35°	327	333	147	13	0	207
50°-60°	210.9	7.7	2.5	45°	390	438	177	6	0	305
60°-70°	255.9	9.3	3.0	55°	436	513	211	0	0	394
70°-80°	291.5	10.6	3.4	65°	484	542	242	0	0	477
80°-90°	313.2	11.4	3.7	75°	501	594	262	0	0	531
90°-100°	308.1	11.2	3.6	85°	538	622	273	0	0	433
100°-110°	284.3	10.4	3.3	90°	541	616	276	0	0	299
110°-120°	236.8	8.6	2.8	95°	559	601	275	0	0	449
120°-130°	176.4	6.4	2.1	105°	576	558	268	0	0	600
130°-140°	122.0	4.4	1.4	115°	553	496	231	0	0	542
140°-150°	83.8	3.1	1.0	125°	467	376	204	0	0	416
150°-160°	58.3	2.1	0.7	135°	335	269	187	13	0	265
160°-170°	34.8	1.3	0.4	145°	247	201	176	36	0	157
170°-180°	9.5	0.3	0.1	155°	181	171	170	65	15	85
0°-30°	96.0	3.5	1.1	165°	113	154	160	97	42	37
0°-40°	200.4	7.3	2.4	175°	119	107	90	68	62	12
0°-60°	571.4	20.8	6.7	180°	90	90	90	90	90	
0°-90°	1432.0	52.2	16.8							
90°-120°	829.2	30.2	9.8							
90°-150°	1211.3	44.1	14.3							
90°-180°	1314.0	47.9	15.5							
0°-180°	2745.9	100.0	32.3							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	88	88	88	88	88	88	88	88	88
5°	115	109	109	96	88	78	68	65	65
10°	144	138	130	113	94	77	59	49	49
15°	172	163	153	140	99	70	48	33	30
20°	206	196	186	165	111	66	36	22	20
25°	234	235	229	184	117	62	28	12	8
30°	285	285	271	218	134	57	20	4	0
35°	327	361	333	256	147	55	13	0	0
40°	372	403	404	292	160	54	8	0	0
45°	390	454	438	334	177	51	6	0	0
50°	421	482	489	364	196	45	0	0	0
55°	436	506	513	393	211	42	0	0	0
60°	462	508	535	418	228	45	0	0	0
65°	484	543	542	450	242	45	0	0	0
70°	490	560	578	473	260	38	0	0	0
75°	501	567	594	477	262	39	0	0	0
80°	515	596	629	489	268	42	0	0	0
85°	538	587	622	512	273	42	0	0	0
90°	541	601	616	489	276	43	0	0	0
95°	559	572	601	486	275	43	0	0	0
100°	550	567	594	478	269	44	0	0	0
105°	576	564	558	437	268	47	0	0	0
110°	565	541	537	396	244	47	0	0	0
115°	553	508	496	355	231	49	0	0	0
120°	512	470	434	318	216	54	0	0	0
125°	467	424	376	267	204	61	0	0	0
130°	407	370	322	236	192	68	9	0	0
135°	335	320	269	217	187	73	13	0	0
140°	288	268	231	205	184	82	20	0	0
145°	247	229	201	188	176	93	36	9	0
150°	211	198	187	186	171	97	49	22	0
155°	181	173	171	180	170	109	65	31	15
160°	157	152	166	175	173	123	85	53	26
165°	113	124	154	160	160	134	97	66	42
170°	143	138	113	129	144	134	105	85	67
175°	119	112	107	93	90	77	68	67	62
180°	90	90	90	90	90	90	90	90	90

(END OF REPORT)