

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: 10366.0

Luminaire Tested: **RCS-12100MHDTBK**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 10366.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: RCS-12100MHDTBK
Description: FAIL-SAFE "COMPASS" SERIES 12"DIA WALLMOUNT
WHITE FLAT REFLECTOR w/FROSTED GLASS PRISMATIC LENS
BLACK PROTOTYPE CROSS PATTERN LENS SHIELDING
Light Source: 1/100W CLEAR ED17 MH
M90 M100/U
Ballast/Driver: -

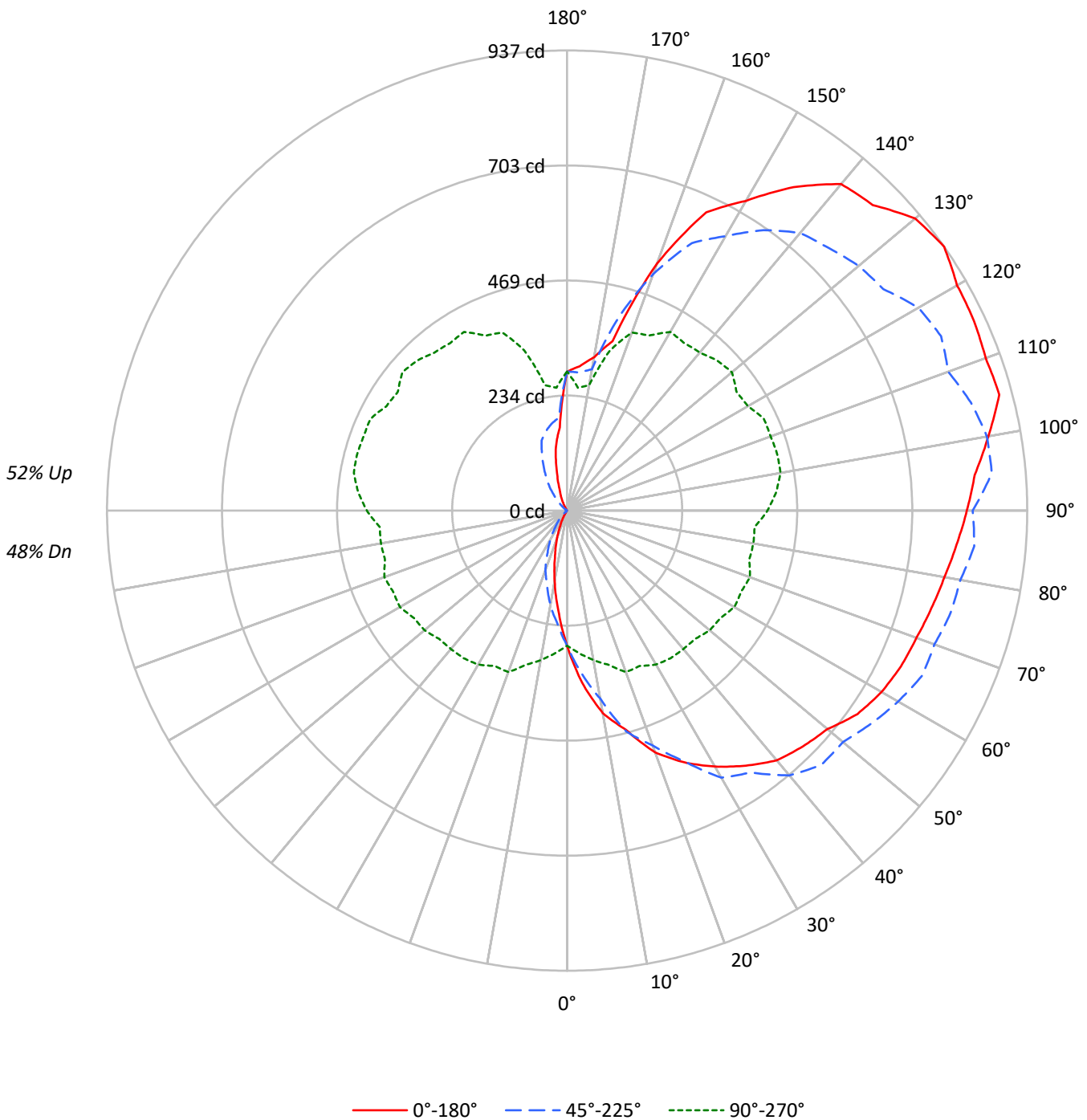
Summary

Lumens per Lamp: 8500 (1 lamp)
Luminaire Lumens: 4865.1 lumens
Efficiency: 57.2%
Efficacy: 48.7 lumens/watt
Spacing Criteria (0/90/45): 1.8 / 1.93 / 2.09
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_{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									
RC	80									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	61	61	61	61	56	56	56	56	47	47	47	39	39	39	31	31	31	27																			
1	53	50	46	44	49	45	43	40	37	35	33	30	29	27	23	22	21	18																			
2	47	42	38	34	43	38	34	31	31	28	26	25	23	21	19	18	16	13																			
3	43	36	31	27	39	33	28	25	27	24	21	22	19	17	16	14	13	10																			
4	39	32	26	22	35	29	24	20	24	20	17	19	16	14	14	12	10	8																			
5	35	28	22	19	32	25	21	17	21	17	14	17	14	11	13	10	9	7																			
6	32	25	19	16	29	23	18	15	19	15	12	15	12	10	11	9	7	6																			
7	30	22	17	14	27	20	16	13	17	13	10	13	10	8	10	8	6	5																			
8	28	20	15	12	25	18	14	11	15	12	9	12	9	7	9	7	6	4																			
9	26	18	13	10	23	17	12	10	14	10	8	11	8	6	9	6	5	4																			
10	24	17	12	9	22	15	11	8	13	9	7	10	8	6	8	6	4	3																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	17969	17969	17969
5°	17318	17611	10037
10°	16633	17429	5796
15°	15469	17339	3181
20°	15271	17843	1749
25°	14702	17160	805
30°	14201	17315	330
35°	13794	17218	0
40°	13501	17068	0
45°	13051	17049	0
50°	12702	17578	0
55°	12776	17875	0
60°	12715	18798	0
65°	12651	19225	0
70°	12618	20188	0
75°	12747	20486	0
80°	12990	21715	0
85°	13404	23100	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	27.3	0.6	0.3	0°	275	275	275	275	275	
10°-20°	87.5	1.8	1.0	5°	352	332	292	230	204	35
20°-30°	152.6	3.1	1.8	15°	462	466	325	157	95	134
30°-40°	219.2	4.5	2.6	25°	566	563	349	94	31	262
40°-50°	281.5	5.8	3.3	35°	634	651	367	44	0	399
50°-60°	337.0	6.9	4.0	45°	679	732	369	15	0	526
60°-70°	383.6	7.9	4.5	55°	722	756	381	0	0	645
70°-80°	411.8	8.5	4.8	65°	750	797	391	0	0	744
80°-90°	433.3	8.9	5.1	75°	768	808	384	0	0	813
90°-100°	455.2	9.4	5.4	85°	796	832	383	0	0	647
100°-110°	451.4	9.3	5.3	90°	814	826	408	0	0	446
110°-120°	417.9	8.6	4.9	95°	833	868	427	0	0	692
120°-130°	372.4	7.7	4.4	105°	911	851	443	0	0	952
130°-140°	316.1	6.5	3.7	115°	914	840	442	0	0	906
140°-150°	245.1	5.0	2.9	125°	937	786	421	4	0	833
150°-160°	166.1	3.4	2.0	135°	880	755	432	24	0	688
160°-170°	83.3	1.7	1.0	145°	804	697	416	67	0	505
170°-180°	23.7	0.5	0.3	155°	670	601	393	119	27	303
0°-30°	267.4	5.5	3.1	165°	357	408	338	167	79	113
0°-40°	486.6	10.0	5.7	175°	295	282	251	190	170	29
0°-60°	1105.2	22.7	13.0	180°	283	283	283	283	283	
0°-90°	2333.9	48.0	27.5							
90°-120°	1324.4	27.2	15.6							
90°-150°	2258.1	46.4	26.6							
90°-180°	2531.0	52.0	29.8							
0°-180°	4865.1	100.0	57.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	275	275	275	275	275	275	275	275	275
5°	352	349	332	320	292	252	230	213	204
10°	419	414	389	357	309	245	196	160	146
15°	462	476	466	409	325	234	157	115	95
20°	524	536	509	453	350	219	129	77	60
25°	566	567	563	495	349	200	94	47	31
30°	602	634	628	542	362	178	67	22	14
35°	634	674	651	566	367	151	44	7	0
40°	664	712	704	589	368	132	27	0	0
45°	679	727	732	614	369	118	15	0	0
50°	692	740	733	628	379	107	4	0	0
55°	722	772	756	639	381	93	0	0	0
60°	739	772	778	677	393	86	0	0	0
65°	750	769	797	692	391	79	0	0	0
70°	757	773	796	672	396	70	0	0	0
75°	768	791	808	680	384	65	0	0	0
80°	780	816	813	676	385	66	0	0	0
85°	796	827	832	671	383	62	0	0	0
90°	814	830	826	679	408	67	0	0	0
95°	833	860	868	711	427	71	0	0	0
100°	871	860	868	740	441	82	0	0	0
105°	911	877	851	716	443	80	0	0	0
110°	907	869	826	708	441	84	0	0	0
115°	914	842	840	697	442	96	0	0	0
120°	917	838	826	686	425	108	0	0	0
125°	937	849	786	677	421	113	4	0	0
130°	925	827	775	659	438	130	13	0	0
135°	880	807	755	658	432	151	24	0	0
140°	868	788	738	624	420	172	43	0	0
145°	804	728	697	611	416	187	67	13	0
150°	728	674	645	567	420	216	91	30	9
155°	670	613	601	534	393	227	119	49	27
160°	535	540	512	472	386	250	152	71	43
165°	357	443	408	399	338	248	167	111	79
170°	317	308	292	300	259	222	180	161	132
175°	295	286	282	301	251	222	190	184	170
180°	283	283	283	283	283	283	283	283	283

(END OF REPORT)