

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: NEO-RAY

Report Number: P243228

Luminaire Tested: **S122RDR-H485D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243228
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-63)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDR-H485D840-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1600.3 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

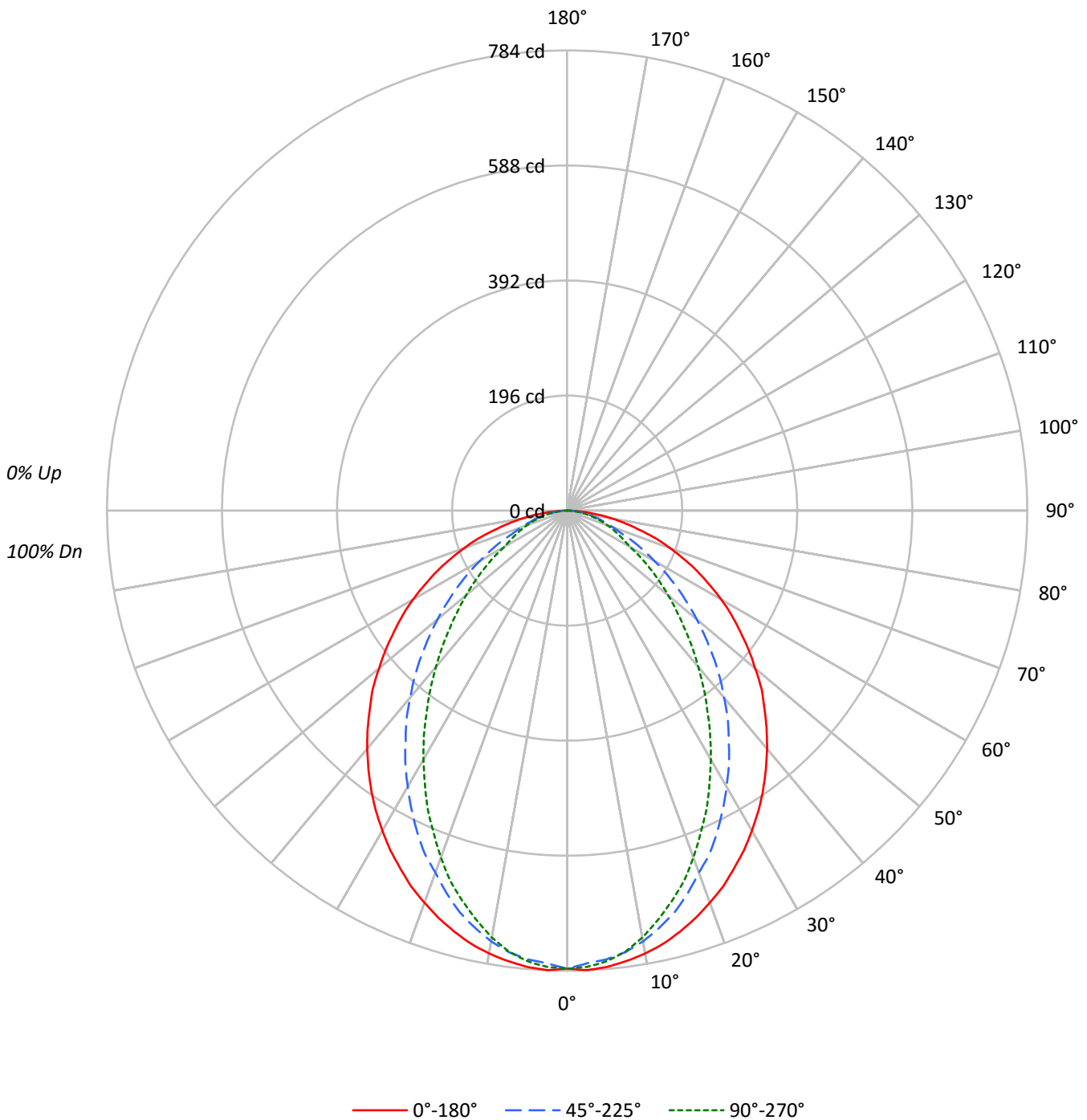
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88					86				
2	101	94	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76					74				
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66					64				
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57					55				
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51					49				
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45					43				
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41					39				
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37					35				
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34					32				
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31					29				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14863	14863	14863
5°	14920	14675	14740
10°	14819	14415	14286
15°	14644	13967	13581
20°	14412	13305	12746
25°	14136	12707	11801
30°	13845	11950	10766
35°	13526	11161	9690
40°	13176	10346	8638
45°	12803	9485	7599
50°	12390	8540	6664
55°	11962	7601	5745
60°	11566	6541	4693
65°	11047	5521	4340
70°	10387	4572	4049
75°	9464	4165	3717
80°	8490	3697	3324
85°	7059	3082	2950



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	4.6
10°-20°	200.3	12.5
20°-30°	281.0	17.6
30°-40°	306.1	19.1
40°-50°	281.3	17.6
50°-60°	220.8	13.8
60°-70°	144.0	9.0
70°-80°	74.5	4.7
80°-90°	19.3	1.2
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°	554.4	34.6
0°-40°	860.4	53.8
0°-60°	1362.5	85.1
0°-90°	1600.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1600.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	780	780	780	780	780	
5°	780	776	768	773	771	74
15°	743	734	708	694	689	209
25°	673	649	605	575	562	310
35°	582	543	480	436	417	364
45°	475	427	352	301	282	367
55°	360	306	229	186	173	323
65°	245	186	122	100	96	242
75°	129	80	57	52	50	138
85°	32	16	14	14	14	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	780.3	780.3	780.3	780.3	780.3
2.5°	783.7	780.3	772.2	779.6	778.3
5°	780.3	776.3	767.5	772.9	770.9
7.5°	774.2	770.2	758.8	761.5	758.1
10°	766.2	760.8	745.3	742.6	738.6
12.5°	756.1	748.7	727.8	719.7	714.3
15°	742.6	733.9	708.3	694.1	688.7
17.5°	727.8	715.0	683.4	667.2	661.8
20°	711.0	696.1	656.4	639.6	628.8
22.5°	693.5	674.6	633.5	607.3	594.5
25°	672.6	649.0	604.6	575.0	561.5
27.5°	652.4	624.8	574.3	540.0	525.1
30°	629.5	599.2	543.3	503.6	489.5
32.5°	606.6	571.6	513.0	469.9	453.8
35°	581.7	543.3	480.0	435.6	416.7
37.5°	556.1	516.4	449.7	400.6	382.4
40°	529.9	485.4	416.1	364.9	347.4
42.5°	502.9	457.8	384.4	331.9	315.1
45°	475.3	426.8	352.1	300.9	282.1
47.5°	449.1	396.5	319.1	270.6	252.5
50°	418.1	366.3	288.2	239.0	224.9
52.5°	389.8	336.0	257.9	210.7	198.6
55°	360.2	306.3	228.9	185.8	173.0
57.5°	332.6	275.4	200.0	160.9	148.8
60°	303.6	245.7	171.7	136.0	123.2
62.5°	273.3	215.4	146.8	113.1	109.1
65°	245.1	185.8	122.5	99.6	96.3
67.5°	214.8	158.2	97.6	87.5	84.2
70°	186.5	131.3	82.1	74.7	72.7
72.5°	158.9	105.7	69.3	63.3	61.3
75°	128.6	80.1	56.6	51.8	50.5
77.5°	102.3	56.6	45.1	41.7	40.4
80°	77.4	41.1	33.7	31.6	30.3
82.5°	53.2	27.6	23.6	22.2	21.5
85°	32.3	15.5	14.1	13.5	13.5
87.5°	12.8	6.1	6.1	5.4	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)