

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: P242549

Luminaire Tested: **S123RDR-S340D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242549
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D935-X4F0-XX-UDD-F-W
Description: DEFINE 3 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1047.2 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

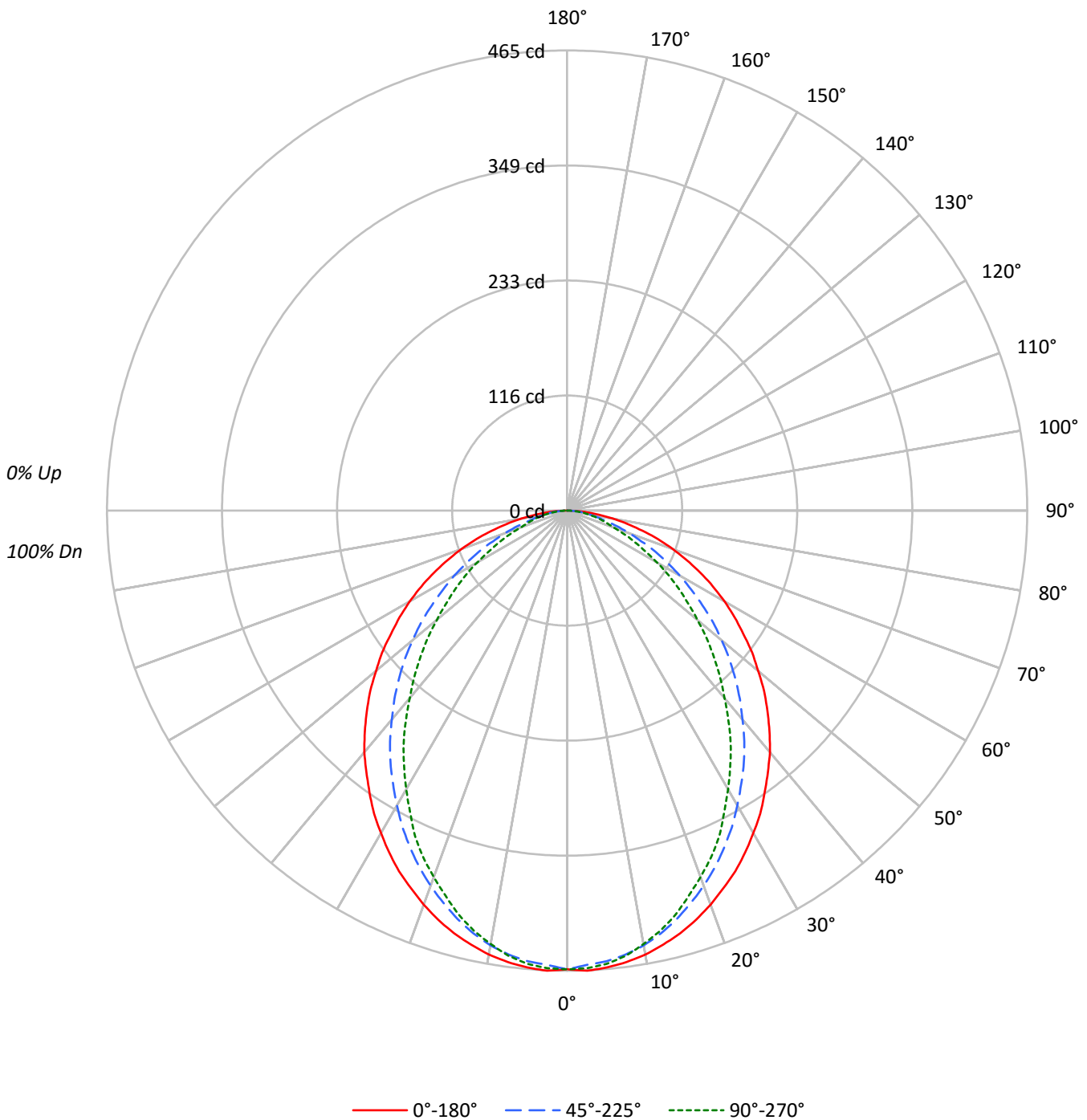
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88					86				
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75					73				
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64					62				
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56					54				
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49					47				
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44					42				
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39					37				
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35					34				
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32					30				
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29					28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5618	5618	5618
5°	5640	5562	5595
10°	5608	5492	5473
15°	5548	5363	5307
20°	5465	5204	5082
25°	5379	5023	4862
30°	5267	4815	4552
35°	5151	4606	4266
40°	5044	4361	3915
45°	4904	4118	3596
50°	4750	3843	3240
55°	4592	3527	2908
60°	4448	3190	2543
65°	4259	2825	2177
70°	4022	2371	1758
75°	3681	1864	1653
80°	3281	1654	1522
85°	2768	1460	1363



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.6	4.2
10°-20°	121.2	11.6
20°-30°	174.5	16.7
30°-40°	196.6	18.8
40°-50°	188.0	18.0
50°-60°	153.9	14.7
60°-70°	103.8	9.9
70°-80°	52.0	5.0
80°-90°	13.6	1.3
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°	339.3	32.4
0°-40°	535.9	51.2
0°-60°	877.8	83.8
0°-90°	1047.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1047.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	464	464	464	464	464	
5°	464	462	457	460	460	44
15°	442	438	427	426	423	125
25°	402	393	376	368	364	185
35°	348	335	311	295	288	218
45°	286	269	240	219	210	221
55°	217	199	167	145	138	195
65°	148	128	98	80	76	147
75°	79	60	40	36	35	84
85°	20	12	10	10	10	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	463.5	463.5	463.5	463.5	463.5
2.5°	465.4	463.9	459.4	463.5	462.8
5°	463.5	461.6	457.1	460.5	459.8
7.5°	460.1	458.3	452.6	454.9	453.8
10°	455.6	453.0	446.2	446.6	444.7
12.5°	449.2	446.2	437.6	437.2	435.0
15°	442.1	438.0	427.4	425.6	422.9
17.5°	433.5	428.9	415.8	412.0	408.3
20°	423.7	417.7	403.4	398.5	394.0
22.5°	412.8	405.6	390.2	383.8	379.7
25°	402.2	392.9	375.6	367.7	363.5
27.5°	389.5	379.3	360.5	350.0	343.6
30°	376.3	365.0	344.0	331.2	325.2
32.5°	363.2	350.0	327.4	313.2	306.8
35°	348.1	334.6	311.3	295.1	288.3
37.5°	333.1	318.4	294.0	275.9	267.7
40°	318.8	302.3	275.6	256.0	247.4
42.5°	302.6	286.1	258.3	236.5	228.9
45°	286.1	269.2	240.2	218.8	209.8
47.5°	269.9	251.1	222.6	199.2	191.4
50°	251.9	234.2	203.8	180.4	171.8
52.5°	235.7	216.2	186.1	161.7	154.1
55°	217.3	198.9	166.9	145.1	137.6
57.5°	200.7	180.8	148.5	127.8	121.4
60°	183.5	162.8	131.6	111.3	104.9
62.5°	166.2	145.5	114.3	95.5	88.7
65°	148.5	127.8	98.5	80.1	75.9
67.5°	130.8	109.8	81.2	67.3	62.8
70°	113.5	93.2	66.9	53.8	49.6
72.5°	96.2	76.3	53.0	42.9	41.7
75°	78.6	60.5	39.8	36.1	35.3
77.5°	62.4	45.9	31.2	28.9	28.2
80°	47.0	31.6	23.7	22.6	21.8
82.5°	32.3	19.5	16.9	15.8	15.8
85°	19.9	11.7	10.5	9.8	9.8
87.5°	9.0	4.9	4.9	4.5	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)