

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059029

Luminaire Tested: S123RDR-S1000D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059029
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D840-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

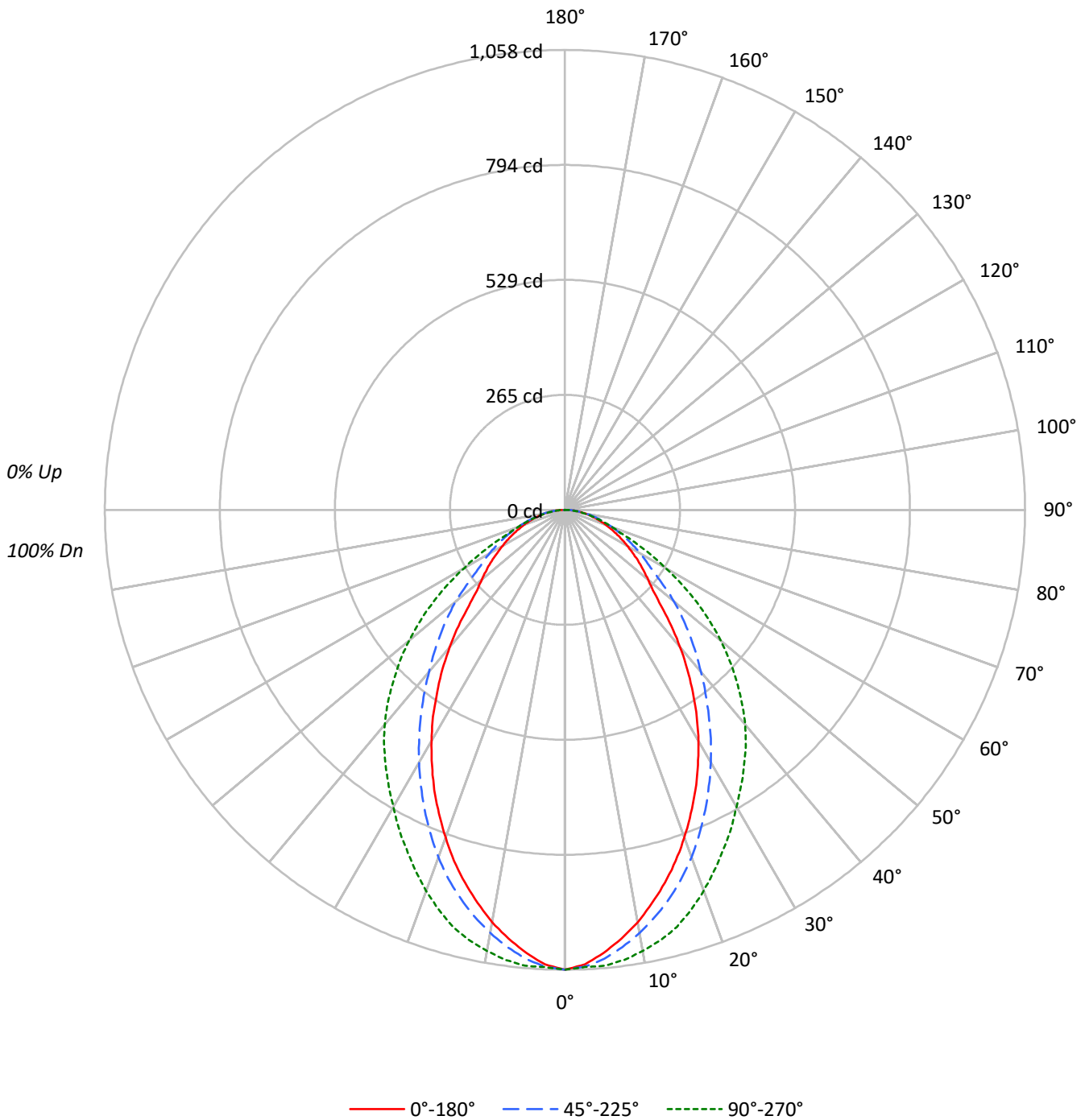
Lumens per Lamp: N/A
Luminaire Lumens: 1910.9 lumens
Efficiency: N/A
Efficacy: 54.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: 24 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12422	12422	12422
5°	12060	12221	12411
10°	11490	11785	12288
15°	10795	11262	12076
20°	10027	10632	11654
25°	9207	9882	11167
30°	8324	9097	10695
35°	7342	8267	10294
40°	6311	7451	9885
45°	5189	6714	9268
50°	4554	5981	8540
55°	4215	5104	7567
60°	3873	4690	6261
65°	3618	4307	4926
70°	3406	3917	3917
75°	3208	3602	3375
80°	3016	3273	2854
85°	2843	3180	2169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9268 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	5.1
10°-20°	262.2	13.7
20°-30°	355.5	18.6
30°-40°	371.7	19.5
40°-50°	322.4	16.9
50°-60°	239.8	12.6
60°-70°	153.9	8.1
70°-80°	82.5	4.3
80°-90°	24.9	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°	715.6	37.4
0°-40°	1087.3	56.9
0°-60°	1649.5	86.3
0°-90°	1910.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1910.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1058	1058	1058	1058	1058	
5°	1023	1040	1037	1044	1053	96
15°	888	909	926	964	993	249
25°	711	733	763	814	862	326
35°	512	537	577	650	718	320
45°	312	336	404	491	558	246
55°	206	211	249	320	370	184
65°	130	141	155	165	177	130
75°	71	82	79	76	74	75
85°	21	26	24	20	16	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1057.9	1057.9	1057.9	1057.9	1057.9
2.5°	1046.7	1061.6	1051.7	1051.7	1052.9
5°	1023.1	1040.5	1036.8	1044.2	1052.9
7.5°	994.6	1013.2	1014.5	1031.8	1044.2
10°	963.6	982.2	988.4	1013.2	1030.6
12.5°	926.4	947.5	958.7	989.7	1014.5
15°	888.0	909.0	926.4	963.6	993.4
17.5°	847.0	868.1	890.4	932.6	964.9
20°	802.4	824.7	850.8	892.9	932.6
22.5°	756.5	780.1	807.4	853.2	897.9
25°	710.6	732.9	762.7	813.6	861.9
27.5°	662.3	685.8	716.8	772.6	827.2
30°	613.9	637.5	670.9	730.5	788.8
32.5°	564.3	587.8	623.8	690.8	754.0
35°	512.2	537.0	576.7	649.9	718.1
37.5°	462.6	486.1	530.8	611.4	683.3
40°	411.7	436.5	486.1	573.0	644.9
42.5°	362.1	386.9	445.2	532.0	602.7
45°	312.5	336.1	404.3	491.1	558.1
47.5°	274.1	291.4	365.9	447.7	514.7
50°	249.3	255.5	327.4	405.5	467.5
52.5°	227.0	231.9	285.2	363.4	419.2
55°	205.9	210.8	249.3	320.0	369.6
57.5°	184.8	191.0	222.0	275.3	320.0
60°	164.9	172.4	199.7	235.6	266.6
62.5°	147.6	156.3	177.3	199.7	220.8
65°	130.2	141.4	155.0	164.9	177.3
67.5°	114.1	126.5	133.9	136.4	137.7
70°	99.2	111.6	114.1	114.1	114.1
72.5°	84.3	98.0	95.5	94.3	93.0
75°	70.7	81.9	79.4	75.7	74.4
77.5°	57.0	67.0	63.2	60.8	57.0
80°	44.6	52.1	48.4	45.9	42.2
82.5°	33.5	38.4	34.7	32.2	28.5
85°	21.1	26.0	23.6	19.8	16.1
87.5°	11.2	14.9	12.4	11.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)