

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: P1059291

Luminaire Tested: S123RDR-S560D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059291
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D927-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

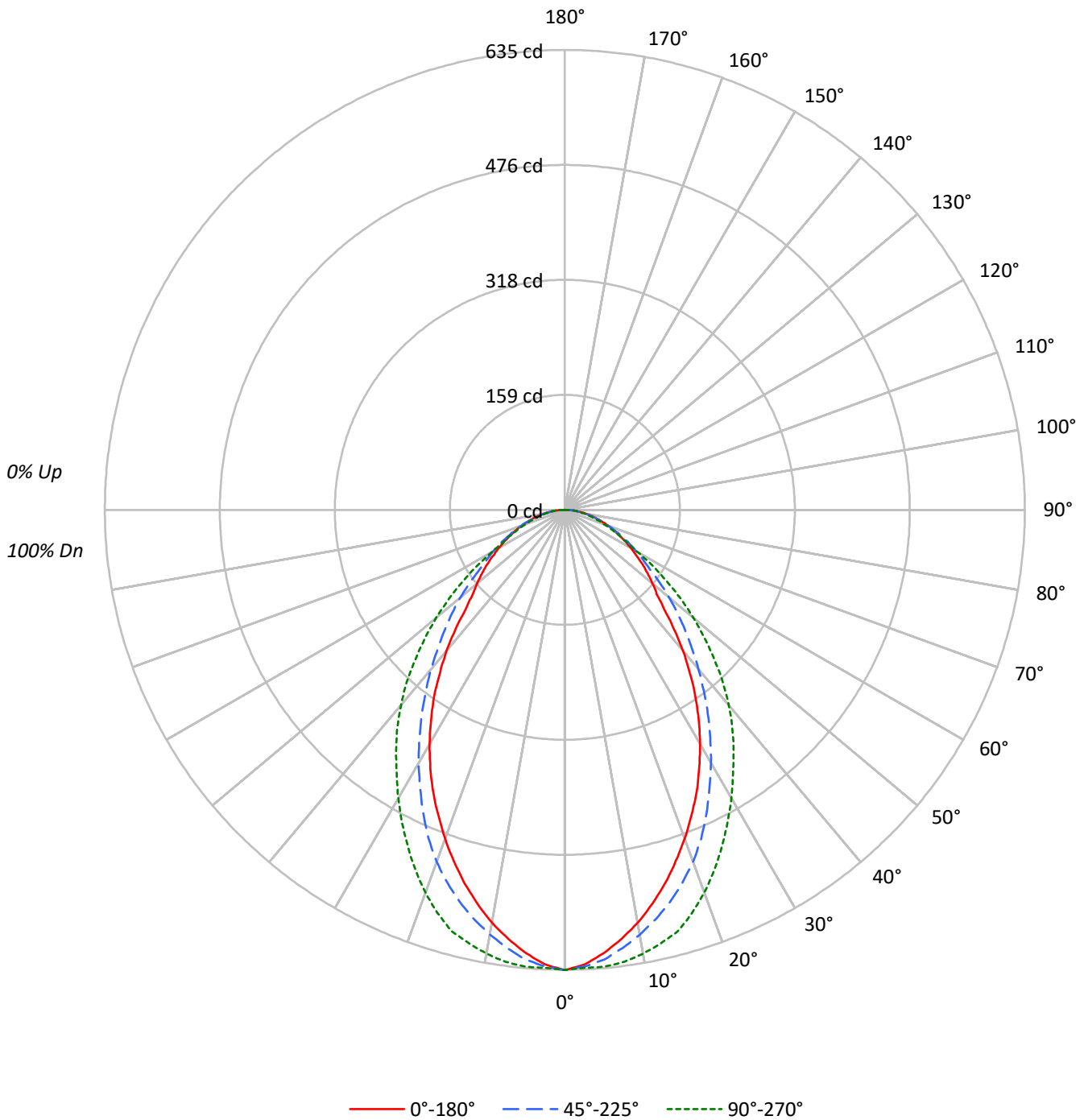
Lumens per Lamp: N/A
Luminaire Lumens: 1116.3 lumens
Efficiency: N/A
Efficacy: 57.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51				
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7460	7460	7460
5°	7243	7347	7463
10°	6904	7099	7419
15°	6494	6813	7324
20°	6039	6463	7030
25°	5575	5992	6644
30°	5063	5471	6234
35°	4507	4937	5823
40°	3889	4399	5397
45°	3213	3894	4839
50°	2886	3436	4225
55°	2676	2932	3503
60°	2466	2670	2684
65°	2295	2415	2248
70°	2160	2197	1971
75°	2033	1960	1738
80°	1920	1772	1630
85°	1846	1994	1846

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4839 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.8	5.3
10°-20°	158.5	14.2
20°-30°	214.5	19.2
30°-40°	220.4	19.7
40°-50°	185.1	16.6
50°-60°	132.7	11.9
60°-70°	84.5	7.6
70°-80°	46.4	4.2
80°-90°	15.5	1.4
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°	431.8	38.7
0°-40°	652.2	58.4
0°-60°	970.0	86.9
0°-90°	1116.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1116.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	635	635	635	635	635	
5°	614	626	623	628	633	58
15°	534	549	560	584	602	150
25°	430	447	462	488	513	197
35°	314	331	344	375	406	196
45°	194	210	234	268	291	153
55°	131	133	143	162	171	117
65°	83	88	87	82	81	82
75°	45	49	43	40	38	48
85°	14	14	15	15	14	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	635.3	635.3	635.3	635.3	635.3
2.5°	628.2	636.9	630.9	631.5	633.1
5°	614.5	625.5	623.3	627.6	633.1
7.5°	597.6	609.6	610.2	620.5	629.3
10°	579.0	591.6	595.4	611.2	622.2
12.5°	557.1	570.8	579.0	598.7	612.9
15°	534.2	548.9	560.4	584.5	602.5
17.5°	509.0	524.9	539.6	565.3	583.9
20°	483.3	500.3	517.2	541.3	562.6
22.5°	456.5	474.0	491.5	515.0	538.5
25°	430.3	446.7	462.5	487.7	512.8
27.5°	401.8	418.8	432.5	460.3	486.6
30°	373.4	390.4	403.5	432.5	459.8
32.5°	343.9	361.4	373.4	403.5	431.9
35°	314.4	331.3	344.4	375.1	406.2
37.5°	283.2	301.8	314.9	349.4	380.0
40°	253.7	271.2	287.0	323.1	352.1
42.5°	223.1	241.1	259.2	296.3	323.1
45°	193.5	210.5	234.5	268.4	291.4
47.5°	172.2	183.2	211.0	239.5	261.3
50°	158.0	162.4	188.1	213.2	231.3
52.5°	143.8	147.1	164.6	187.5	201.2
55°	130.7	133.4	143.2	162.4	171.1
57.5°	116.5	119.2	127.4	138.3	143.2
60°	105.0	107.2	113.7	115.4	114.3
62.5°	93.5	96.8	100.1	96.2	94.6
65°	82.6	87.5	86.9	82.0	80.9
67.5°	72.7	77.6	74.9	70.0	68.3
70°	62.9	67.8	64.0	59.0	57.4
72.5°	53.6	59.0	53.0	48.7	47.6
75°	44.8	49.2	43.2	39.9	38.3
77.5°	36.6	39.9	34.4	31.7	30.6
80°	28.4	30.6	26.2	24.6	24.1
82.5°	20.8	21.9	19.1	20.2	19.7
85°	13.7	14.2	14.8	15.3	13.7
87.5°	6.6	9.3	9.3	8.7	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)