

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: P1059125

Luminaire Tested: S123RDR-S1165D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059125
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D927-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

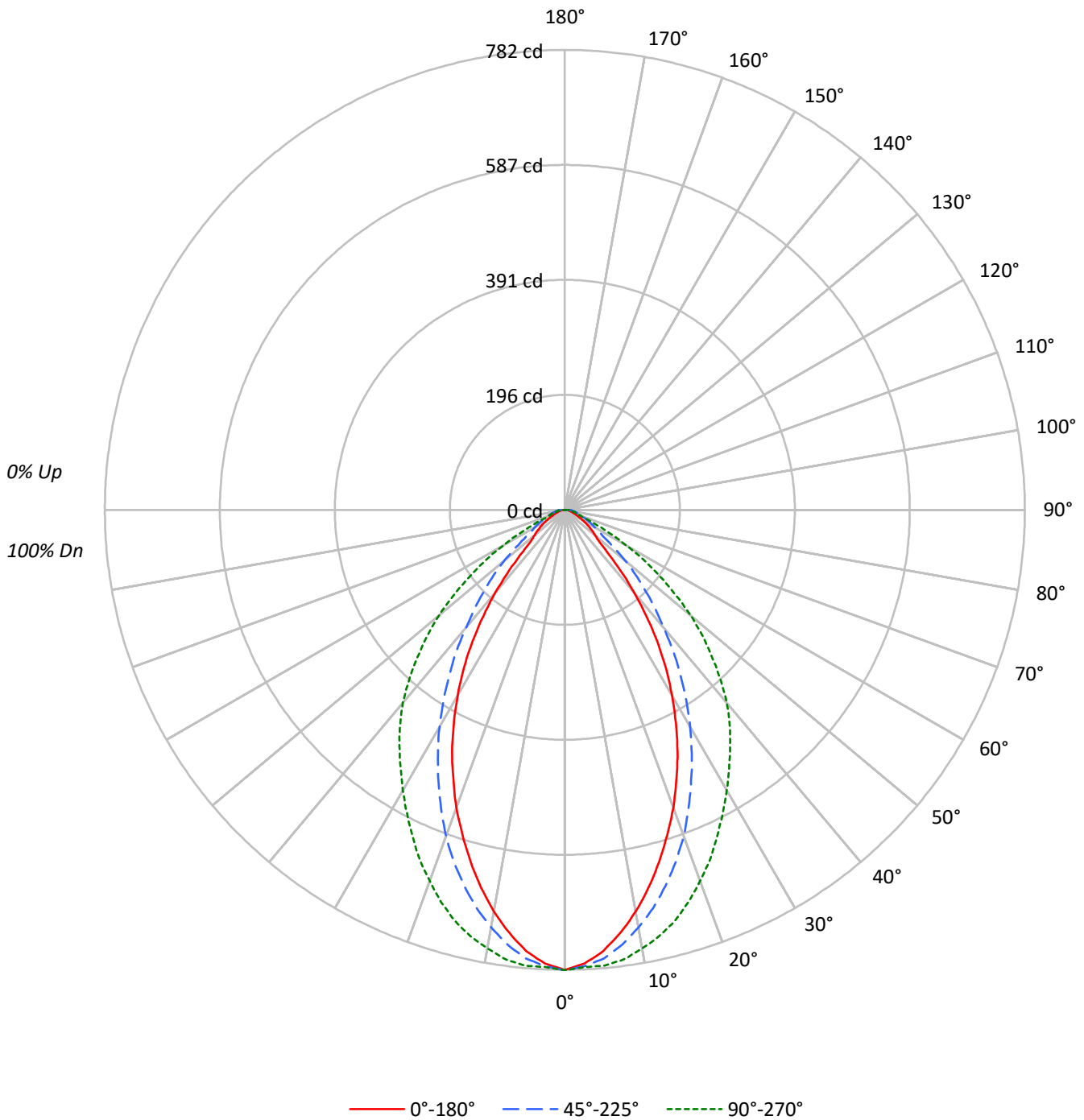
Lumens per Lamp: N/A
Luminaire Lumens: 1047.9 lumens
Efficiency: N/A
Efficacy: 25.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64				64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58				58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44				44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9188	9188	9188
5°	8873	9021	9169
10°	8268	8595	9030
15°	7526	8040	8790
20°	6738	7380	8394
25°	5876	6586	7933
30°	4941	5777	7466
35°	3929	4895	7024
40°	2802	3992	6567
45°	1669	3205	5880
50°	1231	2441	5091
55°	1030	1660	4045
60°	831	1369	2844
65°	667	1175	1523
70°	549	1020	941
75°	517	985	880
80°	541	1082	852
85°	768	1536	1078

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5880 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	6.9
10°-20°	186.7	17.8
20°-30°	238.2	22.7
30°-40°	224.1	21.4
40°-50°	161.0	15.4
50°-60°	92.3	8.8
60°-70°	42.2	4.0
70°-80°	21.2	2.0
80°-90°	10.3	1.0
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°	496.8	47.4
0°-40°	720.8	68.8
0°-60°	974.1	93.0
0°-90°	1047.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1047.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	753	768	765	771	778	70
15°	619	641	661	697	723	173
25°	454	474	508	563	612	207
35°	274	294	342	419	490	170
45°	100	122	193	284	354	84
55°	50	51	81	150	198	45
65°	24	33	42	47	55	24
75°	11	23	22	19	19	13
85°	6	11	11	10	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	782.5	782.5	782.5	782.5	782.5
2.5°	772.2	783.6	776.7	776.7	777.9
5°	752.8	767.6	765.3	771.0	777.9
7.5°	725.3	741.3	745.9	759.6	771.0
10°	693.4	711.6	720.8	742.5	757.3
12.5°	657.9	678.5	693.4	720.8	742.5
15°	619.1	640.8	661.4	696.8	723.1
17.5°	579.1	600.8	627.1	668.2	699.1
20°	539.2	560.9	590.6	634.0	671.7
22.5°	495.7	517.4	549.4	598.6	644.2
25°	453.5	474.0	508.3	563.1	612.3
27.5°	408.9	429.5	467.2	526.6	581.4
30°	364.4	384.9	426.1	490.0	550.6
32.5°	319.8	339.3	383.8	454.6	519.7
35°	274.1	293.6	341.5	419.2	490.0
37.5°	227.3	246.7	302.7	387.2	460.3
40°	182.8	204.5	260.4	355.2	428.4
42.5°	139.4	162.2	226.2	321.0	391.8
45°	100.5	122.2	193.0	284.4	354.1
47.5°	76.5	88.0	163.3	247.9	317.6
50°	67.4	68.5	133.6	214.7	278.7
52.5°	58.3	59.4	103.9	182.8	237.6
55°	50.3	51.4	81.1	149.6	197.6
57.5°	42.3	44.5	66.3	118.8	158.8
60°	35.4	40.0	58.3	90.2	121.1
62.5°	28.6	36.6	50.3	66.3	86.8
65°	24.0	33.1	42.3	46.8	54.8
67.5°	19.4	30.8	35.4	33.1	33.1
70°	16.0	27.4	29.7	27.4	27.4
72.5°	13.7	26.3	25.1	22.8	22.8
75°	11.4	22.8	21.7	19.4	19.4
77.5°	10.3	19.4	18.3	17.1	16.0
80°	8.0	16.0	16.0	14.8	12.6
82.5°	6.9	13.7	13.7	12.6	10.3
85°	5.7	11.4	11.4	10.3	8.0
87.5°	4.6	10.3	10.3	9.1	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)