

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: P1059142

Luminaire Tested: S123RDR-S1165D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059142  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1165D935-X4F0-XX-UDD-SVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

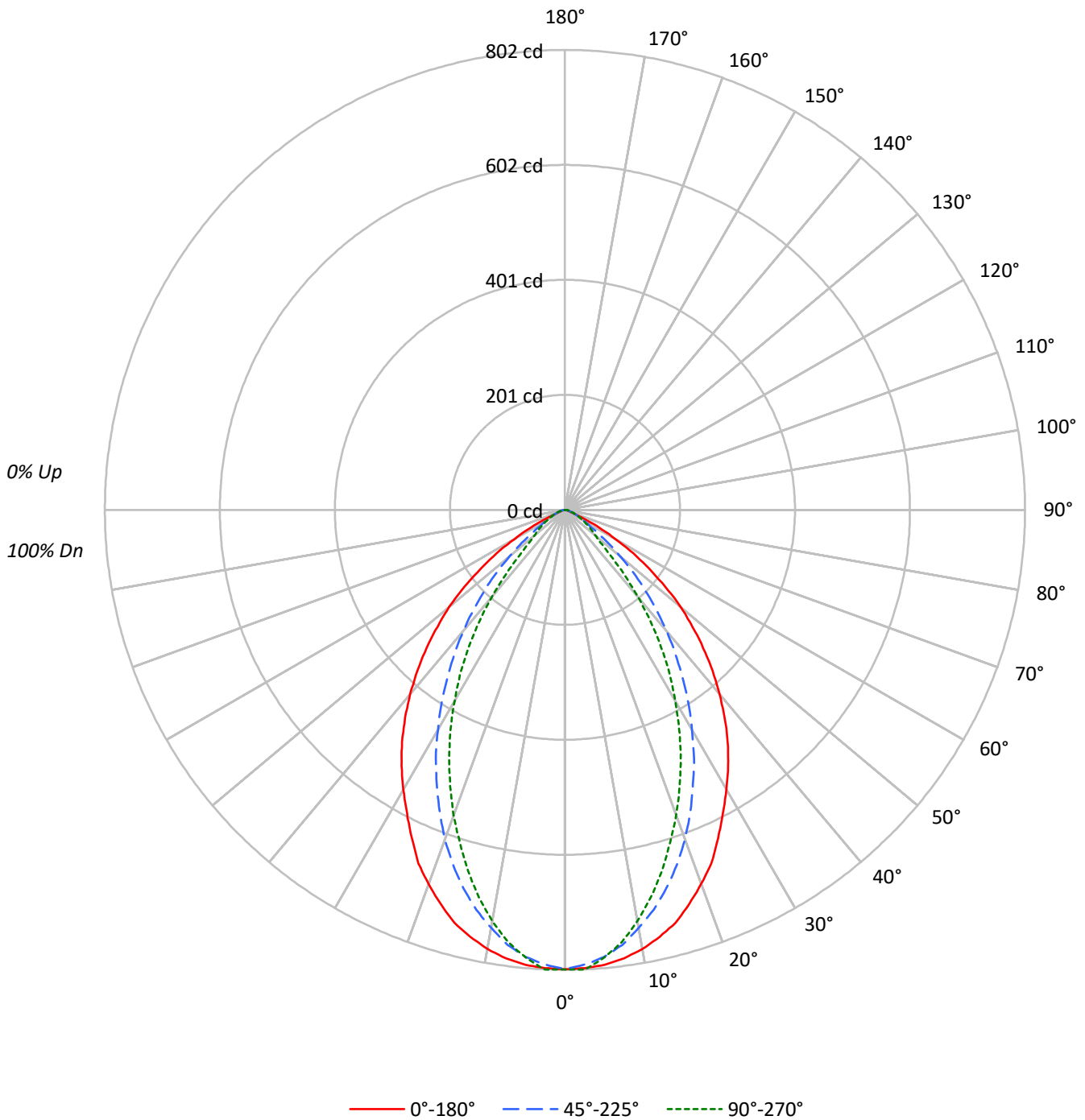
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1034.3 lumens  
Efficiency: N/A  
Efficacy: 24.7 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 0.85 / 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

TEST NUMBER: P1059142

CATALOG NUMBER: S123RDR-S1165D935-X4F0-XX-UDD-SVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1059142

CATALOG NUMBER: S123RDR-S1165D935-X4F0-XX-UDD-SVL-B

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9408	9408	9408
5°	9385	9225	9239
10°	9272	8828	8680
15°	9062	8307	7930
20°	8678	7640	7083
25°	8179	6845	6187
30°	7634	6003	5213
35°	7093	5120	4196
40°	6426	4220	3041
45°	5664	3275	1833
50°	4803	2289	1246
55°	3656	1372	1040
60°	2388	874	815
65°	1000	656	656
70°	340	467	512
75°	281	336	395
80°	169	250	338
85°	162	162	337

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5664 cd/sqm



TEST NUMBER: P1059142

CATALOG NUMBER: S123RDR-S1165D935-X4F0-XX-UDD-SVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.0	7.2
10°-20°	193.6	18.7
20°-30°	248.3	24.0
30°-40°	233.0	22.5
40°-50°	162.6	15.7
50°-60°	84.1	8.1
60°-70°	28.7	2.8
70°-80°	8.2	0.8
80°-90°	1.7	0.2
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°	516.0	49.9
0°-40°	749.0	72.4
0°-60°	995.6	96.3
0°-90°	1034.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1034.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	796	795	783	786	784	75
15°	745	727	683	661	652	209
25°	631	592	528	492	478	290
35°	495	434	357	311	293	308
45°	341	279	197	136	110	262
55°	179	134	67	52	51	161
65°	36	31	24	22	24	42
75°	6	6	7	9	9	6
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



TEST NUMBER: P1059142

CATALOG NUMBER: S123RDR-S1165D935-X4F0-XX-UDD-SVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	801.2	801.2	801.2	801.2	801.2
2.5°	799.9	801.2	793.7	801.2	802.4
5°	796.2	795.0	782.6	786.3	783.8
7.5°	788.8	785.0	765.2	760.2	760.2
10°	777.6	770.2	740.4	731.7	728.0
12.5°	762.7	752.8	714.3	698.2	692.0
15°	745.4	726.7	683.3	661.0	652.3
17.5°	720.5	695.7	648.6	622.6	608.9
20°	694.5	663.5	611.4	580.4	566.8
22.5°	667.2	630.0	570.5	537.0	522.1
25°	631.3	591.6	528.3	492.4	477.5
27.5°	596.5	554.4	487.4	446.5	431.6
30°	563.0	513.4	442.7	403.1	384.5
32.5°	529.6	473.8	400.6	357.2	339.8
35°	494.8	434.1	357.2	311.3	292.7
37.5°	457.6	395.6	316.2	266.6	244.3
40°	419.2	354.7	275.3	219.5	198.4
42.5°	380.7	317.5	234.4	177.3	152.5
45°	341.1	279.0	197.2	136.4	110.4
47.5°	301.4	240.6	161.2	99.2	83.1
50°	262.9	204.6	125.3	73.2	68.2
52.5°	220.8	169.9	94.3	60.8	59.5
55°	178.6	133.9	67.0	52.1	50.8
57.5°	141.4	104.2	48.4	43.4	42.2
60°	101.7	74.4	37.2	36.0	34.7
62.5°	67.0	50.8	29.8	28.5	28.5
65°	36.0	31.0	23.6	22.3	23.6
67.5°	14.9	17.4	17.4	18.6	18.6
70°	9.9	11.2	13.6	14.9	14.9
72.5°	7.4	8.7	9.9	11.2	11.2
75°	6.2	6.2	7.4	8.7	8.7
77.5°	3.7	5.0	5.0	6.2	7.4
80°	2.5	3.7	3.7	5.0	5.0
82.5°	1.2	2.5	2.5	3.7	3.7
85°	1.2	1.2	1.2	1.2	2.5
87.5°	0.0	0.0	0.0	0.0	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)