

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: P1058192

Luminaire Tested: S122RDR-S865D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

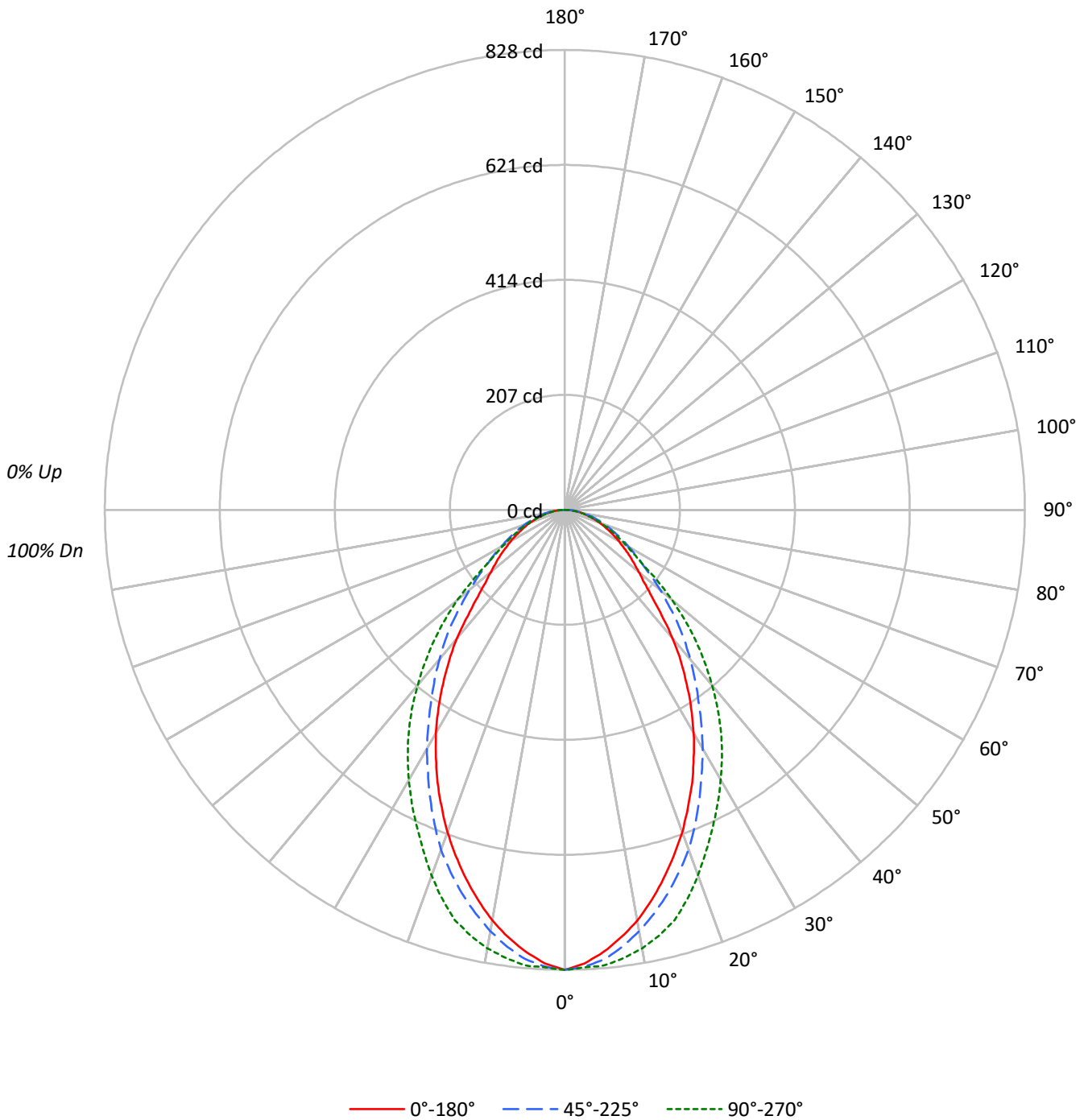
Test Method: LM-79-2019  
Report Number: P1058192  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D950-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1348.4 lumens  
Efficiency: N/A  
Efficacy: 38.5 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
Luminous Opening: Rectangular (W 0.15' 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

TEST NUMBER: P1058192  
CATALOG NUMBER: S122RDR-S865D950-X4F0-XX-UDD-WVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1058192

CATALOG NUMBER: S122RDR-S865D950-X4F0-XX-UDD-WVL-S

**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	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33				

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

	0°	45°	90°
0°	15280	15280	15280
5°	14804	15048	15250
10°	14073	14435	15020
15°	13132	13661	14603
20°	12130	12791	13759
25°	11035	11672	12823
30°	9884	10577	11960
35°	8610	9448	11045
40°	7267	8452	9929
45°	5770	7463	8687
50°	4969	6416	7211
55°	4523	5492	5530
60°	4126	4879	4702
65°	3777	4410	4144
70°	3501	4084	3696
75°	3258	3857	3258
80°	3060	3709	2933
85°	3049	3811	2541

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8687 cd/sqm



TEST NUMBER: P1058192

CATALOG NUMBER: S122RDR-S865D950-X4F0-XX-UDD-WVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.4	5.7
10°-20°	202.1	15.0
20°-30°	265.9	19.7
30°-40°	267.4	19.8
40°-50°	216.7	16.1
50°-60°	149.3	11.1
60°-70°	97.7	7.2
70°-80°	54.4	4.0
80°-90°	18.4	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°	544.4	40.4
0°-40°	811.8	60.2
0°-60°	1177.8	87.4
0°-90°	1348.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1348.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	799	815	812	816	823	75
15°	687	704	715	742	764	193
25°	542	556	573	598	630	248
35°	382	400	419	457	490	238
45°	221	246	286	311	333	175
55°	141	156	171	174	172	126
65°	86	103	101	96	95	86
75°	46	56	54	48	46	49
85°	14	19	18	16	12	16
90°	0	0	0	0	0	

TEST NUMBER: P1058192

CATALOG NUMBER: S122RDR-S865D950-X4F0-XX-UDD-WVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	828.1	828.1	828.1	828.1	828.1
2.5°	817.2	831.7	823.3	823.3	824.5
5°	799.2	814.8	812.4	816.0	823.3
7.5°	776.4	793.2	793.2	804.0	813.6
10°	751.1	768.0	770.4	787.2	801.6
12.5°	719.9	736.7	743.9	765.6	784.8
15°	687.4	704.3	715.1	741.5	764.4
17.5°	652.6	669.4	683.8	711.5	734.3
20°	617.7	633.4	651.4	675.4	700.7
22.5°	579.3	596.1	612.9	635.8	664.6
25°	542.0	556.4	573.3	598.5	629.8
27.5°	502.4	518.0	533.6	563.7	596.1
30°	463.9	479.5	496.4	527.6	561.3
32.5°	423.0	439.9	456.7	491.5	526.4
35°	382.2	400.2	419.4	456.7	490.3
37.5°	342.5	361.8	384.6	423.0	451.9
40°	301.7	322.1	350.9	384.6	412.2
42.5°	258.4	283.6	318.5	347.3	372.6
45°	221.1	246.4	286.0	311.3	332.9
47.5°	193.5	213.9	252.4	274.0	292.0
50°	173.1	188.7	223.5	239.2	251.2
52.5°	156.2	171.9	195.9	206.7	210.3
55°	140.6	156.2	170.7	174.3	171.9
57.5°	125.0	141.8	150.2	146.6	146.6
60°	111.8	129.8	132.2	127.4	127.4
62.5°	98.5	116.6	116.6	110.6	110.6
65°	86.5	103.4	101.0	96.1	94.9
67.5°	75.7	91.3	87.7	82.9	81.7
70°	64.9	79.3	75.7	69.7	68.5
72.5°	55.3	68.5	63.7	58.9	56.5
75°	45.7	56.5	54.1	48.1	45.7
77.5°	37.3	45.7	43.3	38.5	36.1
80°	28.8	36.1	34.9	30.0	27.6
82.5°	21.6	27.6	26.4	22.8	19.2
85°	14.4	19.2	18.0	15.6	12.0
87.5°	7.2	13.2	12.0	10.8	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)