

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: P1058185

Luminaire Tested: S122RDR-S865D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058185
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

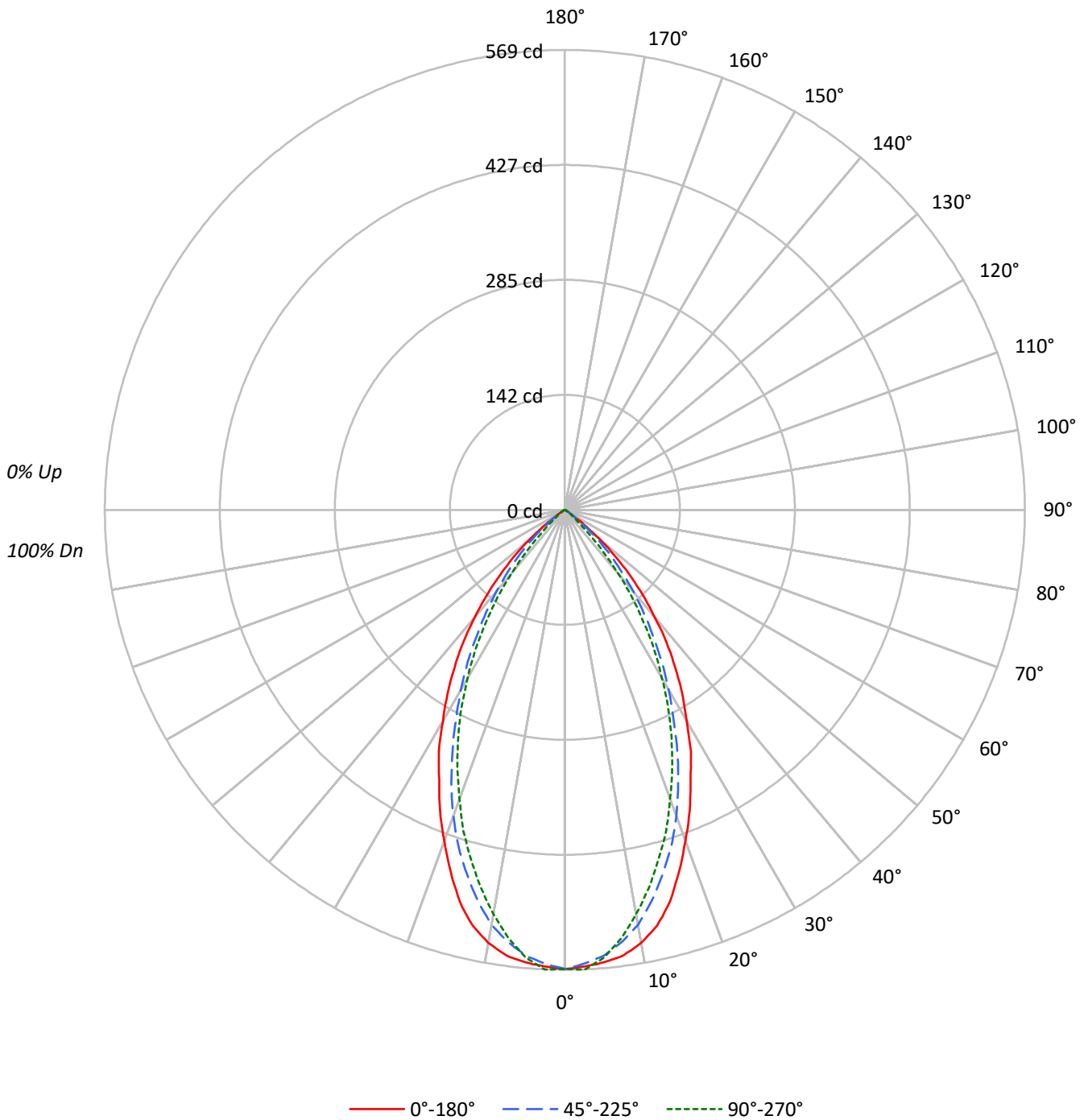
Lumens per Lamp: N/A
Luminaire Lumens: 534.2 lumens
Efficiency: N/A
Efficacy: 15.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1058185

CATALOG NUMBER: S122RDR-S865D950-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1058185

CATALOG NUMBER: S122RDR-S865D950-X4F0-XX-UDD-BVL-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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10481	10481	10481
5°	10410	10254	10299
10°	10193	9766	9518
15°	9590	8925	8556
20°	8560	7923	7476
25°	7482	6700	6356
30°	6422	5476	5118
35°	5357	4273	3841
40°	4165	3153	2459
45°	2915	2101	1065
50°	1585	1102	379
55°	232	386	270
60°	44	89	177
65°	0	52	105
70°	0	0	65
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2915 cd/sqm



TEST NUMBER: P1058185

CATALOG NUMBER: S122RDR-S865D950-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.2	9.8
10°-20°	131.5	24.6
20°-30°	153.3	28.7
30°-40°	122.9	23.0
40°-50°	61.0	11.4
50°-60°	12.0	2.3
60°-70°	1.1	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	337.0	63.1
0°-40°	459.9	86.1
0°-60°	533.0	99.8
0°-90°	534.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	534.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	562	562	554	555	556	53
15°	502	492	467	455	448	139
25°	368	350	329	322	312	169
35°	238	214	190	181	170	148
45°	112	98	80	54	41	86
55°	7	14	12	7	8	14
65°	0	0	1	1	2	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1058185

CATALOG NUMBER: S122RDR-S865D950-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	568.0	568.0	568.0	568.0	568.0
2.5°	565.6	568.0	562.0	568.0	569.2
5°	562.0	562.0	553.6	554.8	556.0
7.5°	556.0	553.6	539.2	536.8	534.4
10°	544.0	539.2	521.2	511.6	508.0
12.5°	527.2	520.0	496.0	485.2	479.2
15°	502.0	492.4	467.2	455.2	447.9
17.5°	469.6	461.2	437.1	423.9	416.7
20°	435.9	423.9	403.5	390.3	380.7
22.5°	403.5	387.9	366.3	356.7	347.1
25°	367.5	349.5	329.1	321.8	312.2
27.5°	337.5	314.6	290.6	285.8	277.4
30°	301.4	279.8	257.0	249.8	240.2
32.5°	270.2	246.2	223.4	215.0	206.6
35°	237.8	213.8	189.7	181.3	170.5
37.5°	206.6	183.7	159.7	146.5	136.9
40°	172.9	153.7	130.9	114.1	102.1
42.5°	142.9	126.1	104.5	82.9	70.9
45°	111.7	98.5	80.5	54.0	40.8
47.5°	82.9	73.3	58.8	31.2	21.6
50°	55.2	51.6	38.4	15.6	13.2
52.5°	30.0	32.4	22.8	9.6	10.8
55°	7.2	14.4	12.0	7.2	8.4
57.5°	1.2	2.4	6.0	6.0	6.0
60°	1.2	1.2	2.4	3.6	4.8
62.5°	1.2	0.0	1.2	2.4	3.6
65°	0.0	0.0	1.2	1.2	2.4
67.5°	0.0	0.0	0.0	1.2	1.2
70°	0.0	0.0	0.0	1.2	1.2
72.5°	0.0	0.0	0.0	0.0	1.2
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)