

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: P1059401

Luminaire Tested: S123RDR-S775D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059401
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

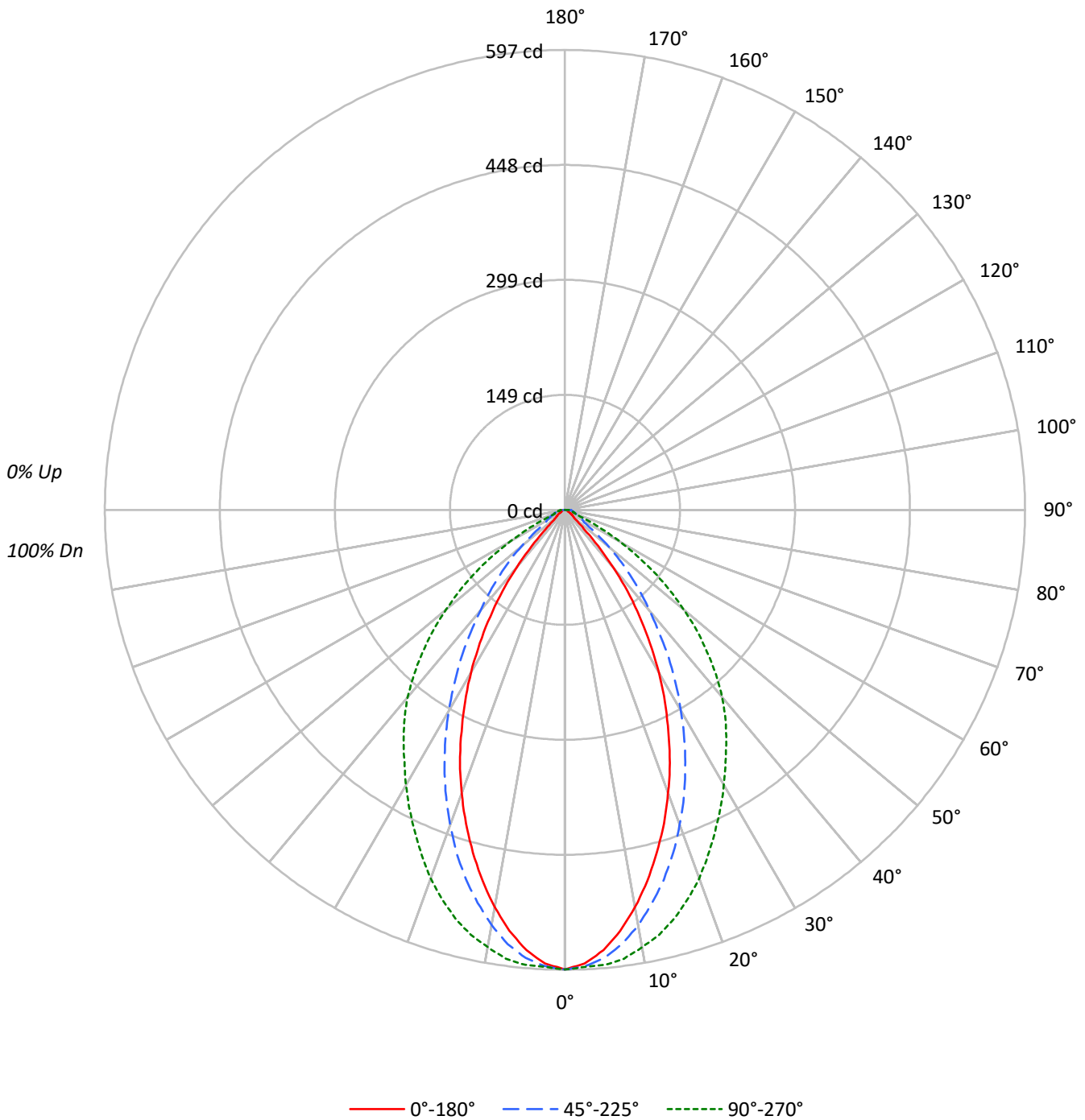
Lumens per Lamp: N/A
Luminaire Lumens: 716.6 lumens
Efficiency: N/A
Efficacy: 27.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1059401

CATALOG NUMBER: S123RDR-S775D950-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1059401

CATALOG NUMBER: S123RDR-S775D950-X4F0-XX-UDD-BVL-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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7006	7006	7006
5°	6764	6883	6990
10°	6244	6527	6875
15°	5601	6033	6676
20°	4891	5438	6362
25°	4114	4787	5969
30°	3303	4083	5592
35°	2420	3362	5231
40°	1496	2615	4867
45°	576	1970	4333
50°	283	1350	3666
55°	223	747	2876
60°	150	622	1928
65°	128	558	861
70°	124	501	501
75°	163	540	495
80°	243	676	555
85°	364	1105	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4333 cd/sqm



TEST NUMBER: P1059401

CATALOG NUMBER: S123RDR-S775D950-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.7	7.6
10°-20°	140.1	19.5
20°-30°	173.8	24.3
30°-40°	155.7	21.7
40°-50°	102.4	14.3
50°-60°	51.3	7.2
60°-70°	20.2	2.8
70°-80°	11.3	1.6
80°-90°	7.1	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°	368.6	51.4
0°-40°	524.3	73.2
0°-60°	678.0	94.6
0°-90°	716.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	716.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	574	583	584	588	593	53
15°	461	475	496	530	549	128
25°	318	338	370	422	461	145
35°	169	192	234	306	365	105
45°	35	58	119	200	261	33
55°	11	13	36	98	140	10
65°	5	13	20	26	31	5
75°	4	12	12	11	11	4
85°	3	8	8	8	6	3
90°	0	0	0	0	0	



TEST NUMBER: P1059401

CATALOG NUMBER: S123RDR-S775D950-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.6	596.6	596.6	596.6	596.6
2.5°	589.3	597.6	593.0	593.0	593.9
5°	573.8	583.0	583.9	587.5	593.0
7.5°	551.0	562.9	568.4	579.3	587.5
10°	523.7	536.4	547.4	566.5	576.6
12.5°	493.6	506.3	522.7	549.2	564.7
15°	460.7	475.3	496.3	530.0	549.2
17.5°	427.0	441.6	467.1	505.4	530.0
20°	391.4	407.8	435.2	479.0	509.1
22.5°	355.8	374.0	403.2	450.7	485.3
25°	317.5	337.5	369.5	421.5	460.7
27.5°	281.0	302.0	335.7	392.3	437.0
30°	243.6	264.6	301.1	362.2	412.4
32.5°	205.3	229.0	267.3	333.9	387.7
35°	168.8	191.6	234.5	306.5	364.9
37.5°	133.2	156.0	200.7	280.1	342.1
40°	97.6	121.3	170.6	254.5	317.5
42.5°	63.9	88.5	144.1	229.0	290.1
45°	34.7	57.5	118.6	199.8	260.9
47.5°	19.2	31.0	95.8	172.4	232.6
50°	15.5	17.3	73.9	146.9	200.7
52.5°	12.8	14.6	52.9	122.2	171.5
55°	10.9	12.8	36.5	98.5	140.5
57.5°	9.1	10.9	29.2	75.7	110.4
60°	6.4	10.9	26.5	55.6	82.1
62.5°	5.5	10.9	22.8	38.3	54.7
65°	4.6	12.8	20.1	25.5	31.0
67.5°	3.6	12.8	17.3	16.4	16.4
70°	3.6	12.8	14.6	13.7	14.6
72.5°	3.6	13.7	13.7	12.8	12.8
75°	3.6	11.9	11.9	10.9	10.9
77.5°	3.6	10.9	10.9	10.0	10.0
80°	3.6	10.0	10.0	9.1	8.2
82.5°	3.6	9.1	9.1	8.2	7.3
85°	2.7	8.2	8.2	8.2	5.5
87.5°	2.7	7.3	8.2	7.3	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)