

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: P1059406

Luminaire Tested: S123RDR-S775D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059406  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S775D950-X4F0-XX-UDD-WVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

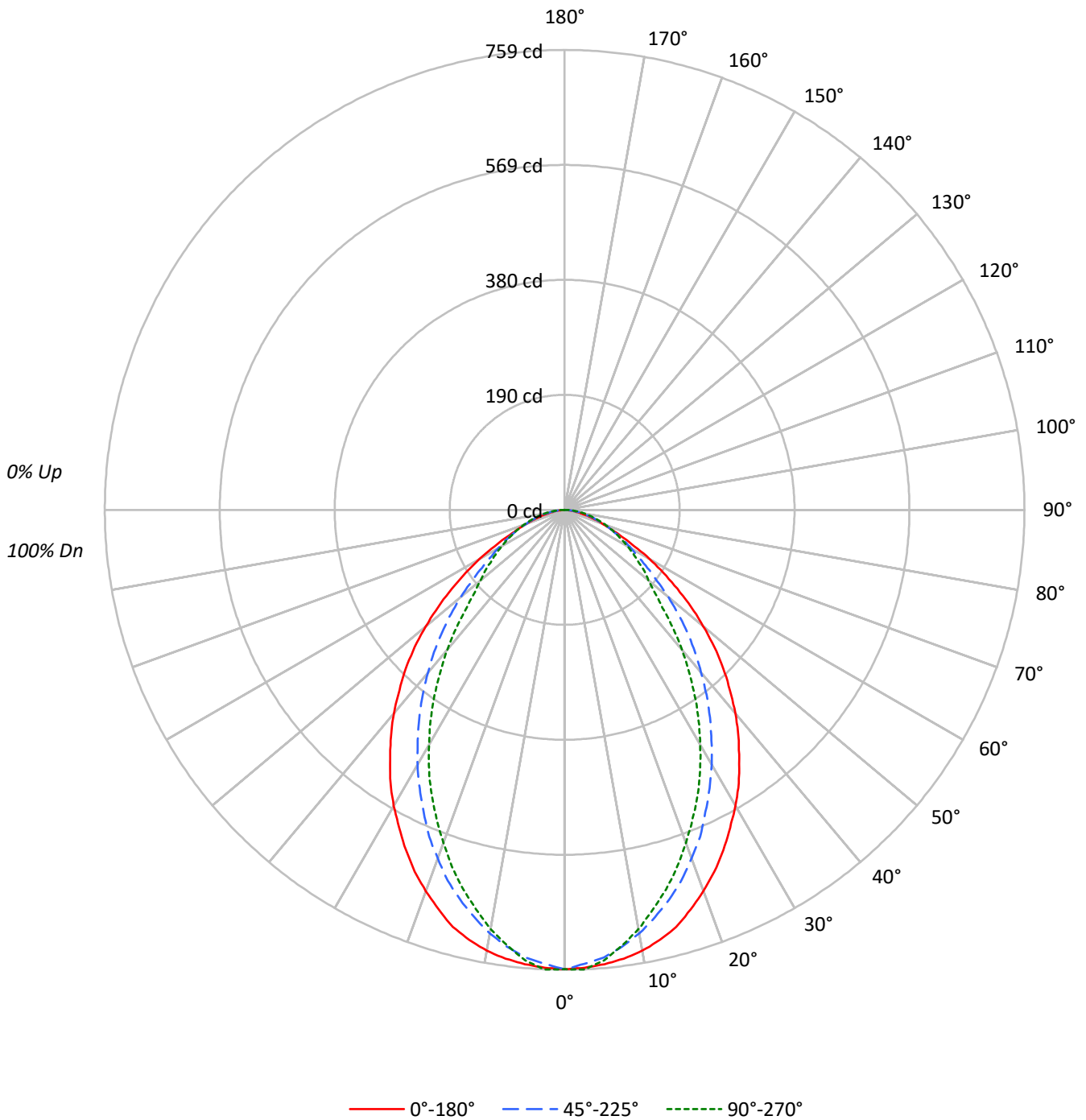
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1325.9 lumens  
Efficiency: N/A  
Efficacy: 51.4 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09  
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: P1059406

CATALOG NUMBER: S123RDR-S775D950-X4F0-XX-UDD-WVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1059406

CATALOG NUMBER: S123RDR-S775D950-X4F0-XX-UDD-WVL-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	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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52				
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35				
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				

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

	0°	45°	90°
0°	8902	8902	8902
5°	8871	8743	8796
10°	8810	8463	8376
15°	8662	8096	7875
20°	8369	7651	7309
25°	8028	7130	6728
30°	7647	6584	6066
35°	7196	5995	5368
40°	6719	5377	4623
45°	6158	4751	3798
50°	5460	4077	3296
55°	4645	3413	3022
60°	3788	2973	2804
65°	2887	2634	2606
70°	2252	2345	2441
75°	1819	2110	2273
80°	1352	1724	2096
85°	741	1105	1846

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6158 cd/sqm



TEST NUMBER: P1059406

CATALOG NUMBER: S123RDR-S775D950-X4F0-XX-UDD-WVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.4	5.3
10°-20°	189.3	14.3
20°-30°	257.4	19.4
30°-40°	266.8	20.1
40°-50°	225.0	17.0
50°-60°	159.7	12.0
60°-70°	97.6	7.4
70°-80°	48.6	3.7
80°-90°	11.0	0.8
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°	517.1	39.0
0°-40°	783.9	59.1
0°-60°	1168.6	88.1
0°-90°	1325.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1325.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	753	753	742	746	746	71
15°	712	699	666	654	648	200
25°	620	592	550	530	519	285
35°	502	464	418	389	374	314
45°	371	332	286	247	229	285
55°	227	203	167	152	148	204
65°	104	100	95	95	94	106
75°	40	43	46	48	50	43
85°	6	6	8	12	14	8
90°	0	0	0	0	0	



TEST NUMBER: P1059406

CATALOG NUMBER: S123RDR-S775D950-X4F0-XX-UDD-WVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	758.1	758.1	758.1	758.1	758.1
2.5°	756.2	757.1	749.9	758.1	759.0
5°	752.6	752.6	741.7	746.2	746.2
7.5°	747.1	745.3	727.1	727.1	725.3
10°	738.9	733.5	709.8	705.2	702.5
12.5°	727.1	718.0	688.8	680.6	675.1
15°	712.5	698.8	666.0	654.2	647.8
17.5°	691.5	677.9	641.4	625.0	617.7
20°	669.7	649.6	612.3	595.9	584.9
22.5°	646.0	620.5	584.0	564.0	552.1
25°	619.6	592.2	550.3	530.3	519.3
27.5°	591.3	561.3	518.4	495.7	484.7
30°	564.0	529.4	485.6	460.1	447.4
32.5°	534.8	495.7	451.0	424.6	411.8
35°	502.0	463.8	418.2	389.1	374.5
37.5°	471.1	431.9	384.5	353.5	337.1
40°	438.3	399.1	350.8	318.9	301.6
42.5°	403.6	366.3	318.9	281.5	265.1
45°	370.8	331.7	286.1	246.9	228.7
47.5°	335.3	298.9	254.2	214.1	201.4
50°	298.9	265.1	223.2	186.8	180.4
52.5°	263.3	235.1	192.2	168.6	165.8
55°	226.9	203.2	166.7	152.2	147.6
57.5°	193.2	175.8	143.0	135.8	133.9
60°	161.3	146.7	126.6	122.1	119.4
62.5°	130.3	122.1	110.2	108.4	106.6
65°	103.9	100.2	94.8	94.8	93.8
67.5°	82.0	82.0	81.1	82.9	82.0
70°	65.6	66.5	68.3	70.2	71.1
72.5°	51.9	54.7	56.5	59.2	60.1
75°	40.1	42.8	46.5	48.3	50.1
77.5°	29.2	31.9	35.5	38.3	40.1
80°	20.0	21.9	25.5	29.2	31.0
82.5°	12.8	13.7	16.4	20.0	21.9
85°	5.5	6.4	8.2	11.8	13.7
87.5°	0.0	0.0	0.9	3.6	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)