

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: P1059400

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059400  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)  
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-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

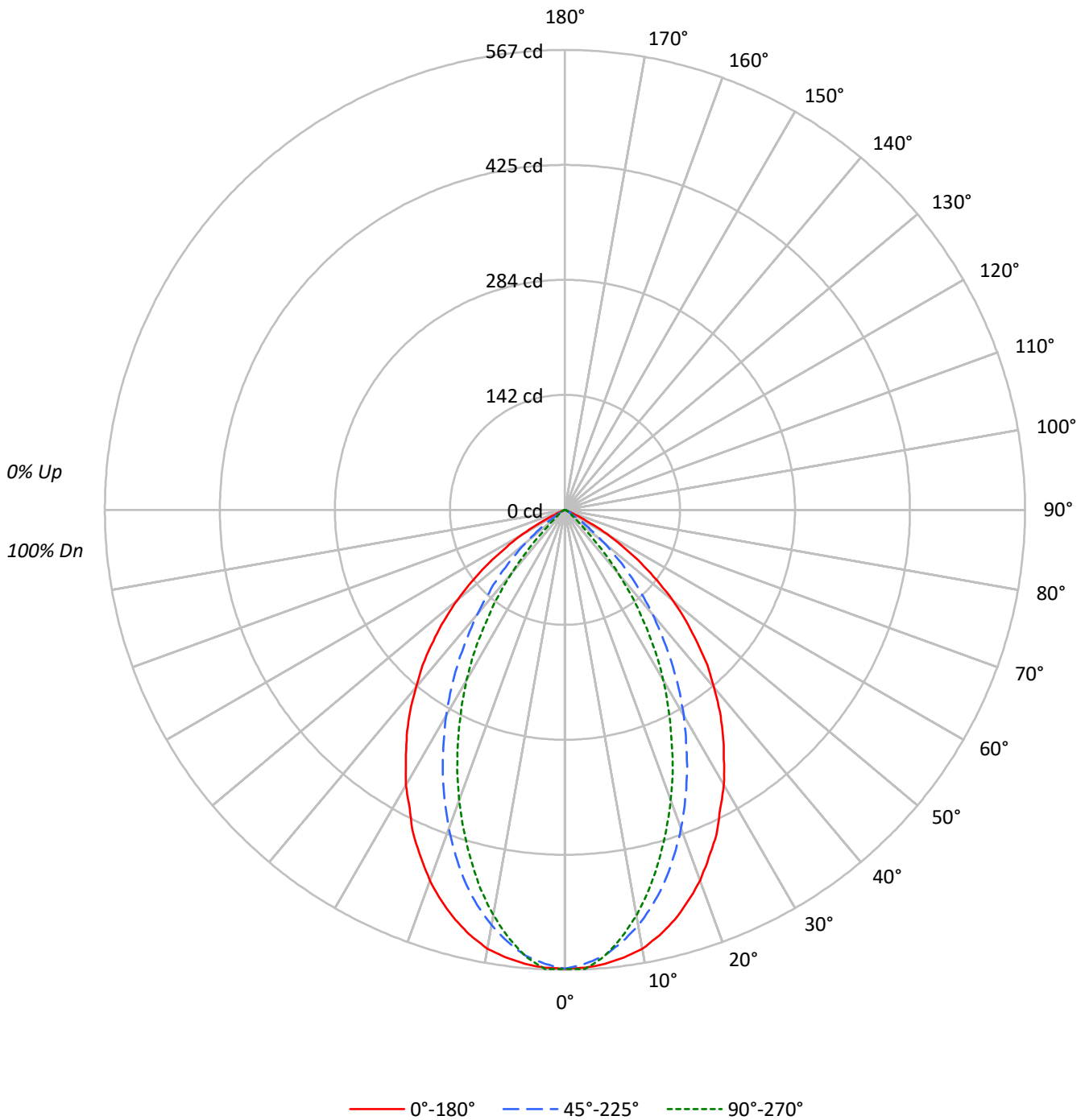
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 645.6 lumens  
Efficiency: N/A  
Efficacy: 25.0 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 0.81 / 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

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### Luminous Intensity Polar Plot





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**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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92				
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76				
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69				
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63				
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58				
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53				
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49				
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46				
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42				

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

	0°	45°	90°
0°	6644	6644	6644
5°	6626	6508	6518
10°	6551	6203	6051
15°	6358	5771	5438
20°	6079	5226	4758
25°	5725	4615	4026
30°	5312	3966	3285
35°	4871	3278	2443
40°	4372	2569	1564
45°	3813	1877	651
50°	3162	1114	250
55°	2332	467	186
60°	1411	171	108
65°	381	100	50
70°	0	31	31
75°	0	0	41
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3813 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.1	8.1
10°-20°	134.4	20.8
20°-30°	167.5	25.9
30°-40°	149.8	23.2
40°-50°	94.5	14.6
50°-60°	39.6	6.1
60°-70°	7.4	1.2
70°-80°	0.2	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°	354.0	54.8
0°-40°	503.8	78.0
0°-60°	637.9	98.8
0°-90°	645.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	645.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	566	566	566	566	566	
5°	562	561	552	554	553	53
15°	523	510	475	455	447	147
25°	442	406	356	325	311	202
35°	340	291	229	188	170	212
45°	230	179	113	60	39	177
55°	114	78	23	9	9	102
65°	14	10	4	2	2	19
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	565.8	565.8	565.8	565.8	565.8
2.5°	564.9	565.8	560.3	565.8	566.7
5°	562.1	561.2	552.1	553.9	553.0
7.5°	556.7	553.9	537.5	533.9	532.1
10°	549.4	542.1	520.2	511.1	507.5
12.5°	537.5	527.5	499.3	484.7	479.2
15°	523.0	510.2	474.7	454.6	447.3
17.5°	505.6	487.4	447.3	425.5	414.5
20°	486.5	461.0	418.2	391.8	380.8
22.5°	463.7	435.5	387.2	359.0	347.1
25°	441.9	406.3	356.2	325.3	310.7
27.5°	414.5	377.2	323.4	291.5	276.1
30°	391.8	348.9	292.5	256.9	242.3
32.5°	364.4	319.8	260.6	221.4	207.7
35°	339.8	290.6	228.7	187.7	170.4
37.5°	313.4	262.4	196.8	154.0	137.6
40°	285.2	234.1	167.6	120.3	102.0
42.5°	259.7	205.9	138.5	89.3	71.1
45°	229.6	178.6	113.0	60.1	39.2
47.5°	202.3	153.1	85.6	33.7	21.0
50°	173.1	126.6	61.0	17.3	13.7
52.5°	143.0	101.1	40.1	11.8	10.9
55°	113.9	78.4	22.8	9.1	9.1
57.5°	85.6	56.5	11.8	7.3	6.4
60°	60.1	37.4	7.3	5.5	4.6
62.5°	34.6	21.9	5.5	3.6	3.6
65°	13.7	10.0	3.6	1.8	1.8
67.5°	0.9	2.7	1.8	0.9	0.9
70°	0.0	0.0	0.9	0.9	0.9
72.5°	0.0	0.0	0.9	0.9	0.9
75°	0.0	0.0	0.0	0.0	0.9
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)