

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: P1059289

Luminaire Tested: S123RDR-S560D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059289  
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-S560D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

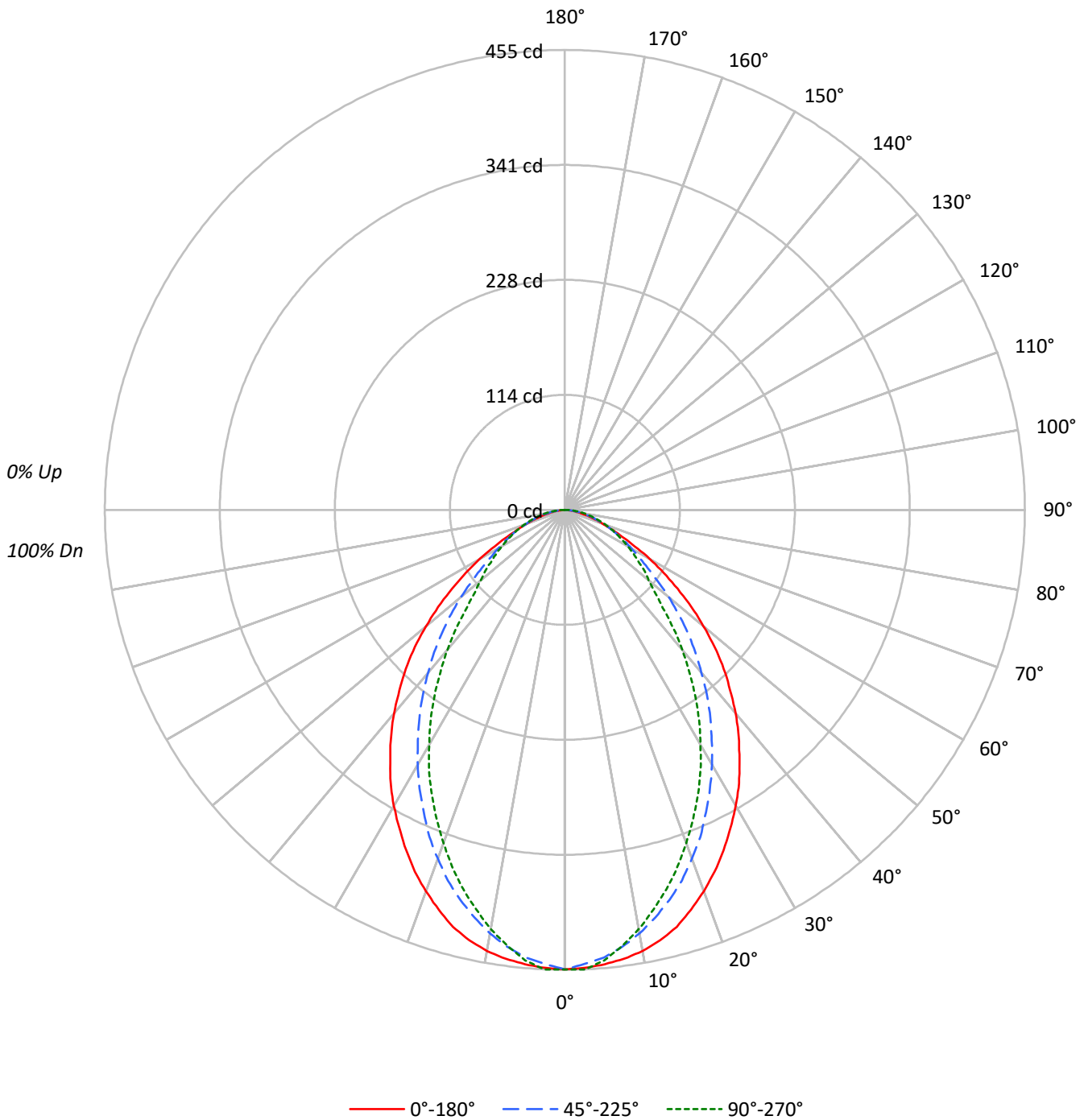
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 795.0 lumens  
Efficiency: N/A  
Efficacy: 40.6 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): 19.6  
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	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°	5338	5338	5338
5°	5320	5242	5275
10°	5283	5075	5022
15°	5195	4855	4723
20°	5018	4589	4384
25°	4813	4276	4035
30°	4586	3948	3638
35°	4315	3595	3220
40°	4028	3224	2771
45°	3693	2850	2277
50°	3274	2446	1977
55°	2784	2047	1812
60°	2271	1783	1682
65°	1731	1578	1564
70°	1349	1408	1463
75°	1089	1266	1361
80°	811	1035	1258
85°	445	660	1105

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3693 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.2	5.3
10°-20°	113.5	14.3
20°-30°	154.3	19.4
30°-40°	160.0	20.1
40°-50°	134.9	17.0
50°-60°	95.8	12.0
60°-70°	58.5	7.4
70°-80°	29.1	3.7
80°-90°	6.6	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°	310.1	39.0
0°-40°	470.1	59.1
0°-60°	700.8	88.1
0°-90°	795.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	795.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	455	455	455	455	455	
5°	451	451	445	448	448	43
15°	427	419	399	392	388	120
25°	372	355	330	318	311	171
35°	301	278	251	233	225	188
45°	222	199	172	148	137	171
55°	136	122	100	91	88	122
65°	62	60	57	57	56	64
75°	24	26	28	29	30	26
85°	3	4	5	7	8	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	454.6	454.6	454.6	454.6	454.6
2.5°	453.5	454.0	449.7	454.6	455.1
5°	451.3	451.3	444.7	447.5	447.5
7.5°	448.0	446.9	436.0	436.0	434.9
10°	443.1	439.8	425.6	422.9	421.2
12.5°	436.0	430.5	413.0	408.1	404.9
15°	427.3	419.1	399.4	392.3	388.5
17.5°	414.7	406.5	384.6	374.8	370.4
20°	401.6	389.6	367.2	357.3	350.8
22.5°	387.4	372.1	350.2	338.2	331.1
25°	371.5	355.1	330.0	318.0	311.4
27.5°	354.6	336.6	310.9	297.2	290.7
30°	338.2	317.4	291.2	275.9	268.3
32.5°	320.7	297.2	270.4	254.6	247.0
35°	301.0	278.1	250.8	233.3	224.6
37.5°	282.5	259.0	230.6	212.0	202.2
40°	262.8	239.3	210.3	191.2	180.8
42.5°	242.0	219.6	191.2	168.8	159.0
45°	222.4	198.9	171.6	148.1	137.1
47.5°	201.1	179.2	152.4	128.4	120.7
50°	179.2	159.0	133.9	112.0	108.2
52.5°	157.9	141.0	115.3	101.1	99.4
55°	136.0	121.8	100.0	91.2	88.5
57.5°	115.8	105.4	85.8	81.4	80.3
60°	96.7	88.0	75.9	73.2	71.6
62.5°	78.1	73.2	66.1	65.0	63.9
65°	62.3	60.1	56.8	56.8	56.3
67.5°	49.2	49.2	48.6	49.7	49.2
70°	39.3	39.9	41.0	42.1	42.6
72.5°	31.1	32.8	33.9	35.5	36.1
75°	24.0	25.7	27.9	29.0	30.0
77.5°	17.5	19.1	21.3	22.9	24.0
80°	12.0	13.1	15.3	17.5	18.6
82.5°	7.6	8.2	9.8	12.0	13.1
85°	3.3	3.8	4.9	7.1	8.2
87.5°	0.0	0.0	0.5	2.2	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)