

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: P1059126

Luminaire Tested: S123RDR-S1165D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059126  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1165D927-X4F0-XX-UDD-SVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

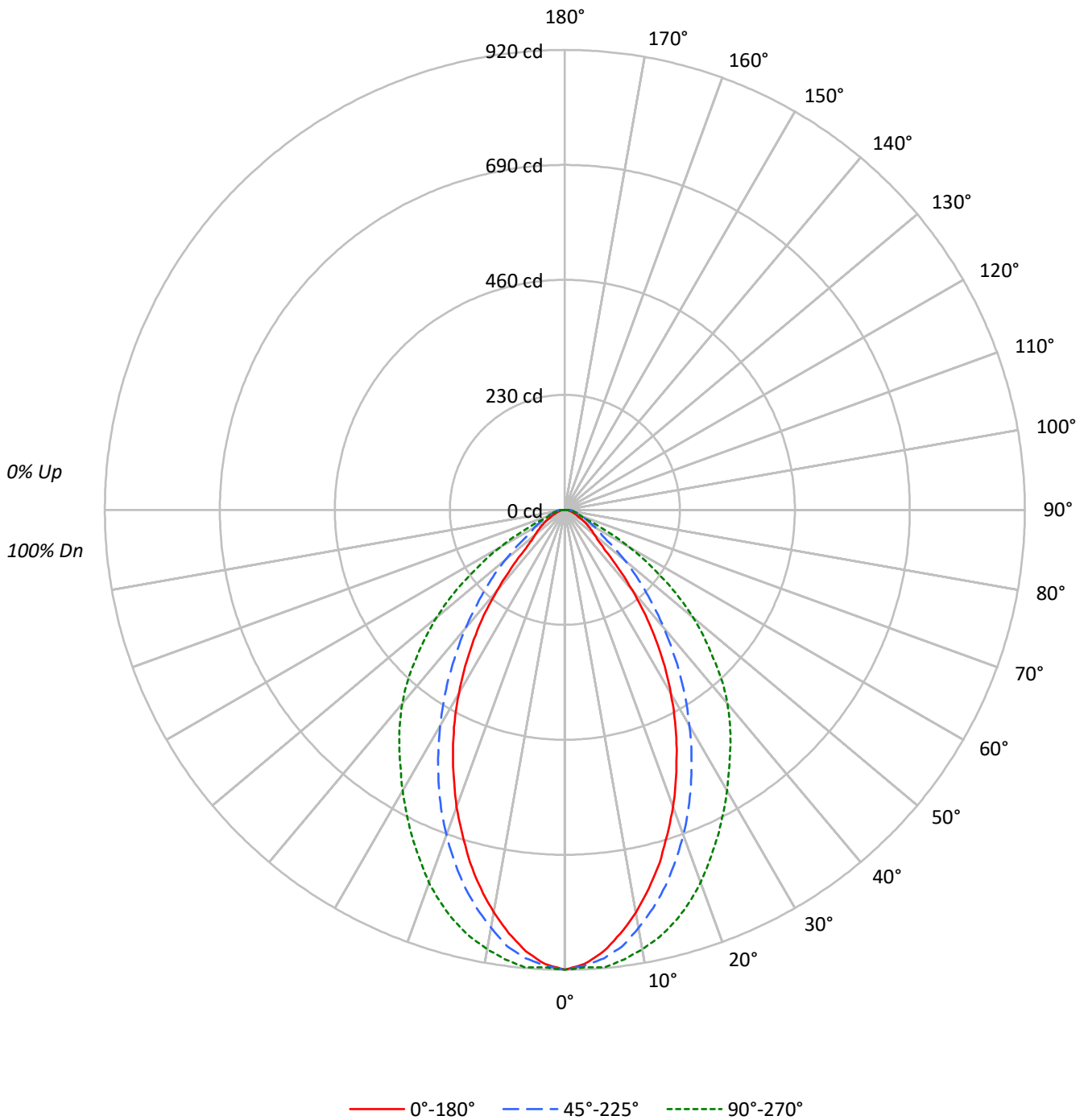
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1234.7 lumens  
Efficiency: N/A  
Efficacy: 29.5 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

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

	0°	45°	90°
0°	10801	10801	10801
5°	10451	10612	10828
10°	9755	10122	10639
15°	8889	9459	10361
20°	7910	8652	9923
25°	6854	7743	9356
30°	5748	6755	8800
35°	4553	5748	8271
40°	3222	4729	7758
45°	1898	3738	6983
50°	1419	2839	6116
55°	1194	1918	4911
60°	965	1637	3488
65°	761	1398	1842
70°	666	1215	1136
75°	622	1139	1089
80°	615	1237	1082
85°	768	1846	1388

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6983 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.6	6.9
10°-20°	220.0	17.8
20°-30°	280.2	22.7
30°-40°	263.5	21.3
40°-50°	189.8	15.4
50°-60°	109.6	8.9
60°-70°	50.1	4.1
70°-80°	25.0	2.0
80°-90°	11.8	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°	584.8	47.4
0°-40°	848.3	68.7
0°-60°	1147.7	93.0
0°-90°	1234.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1234.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	920	920	920	920	920	
5°	887	902	900	910	919	82
15°	731	758	778	822	852	204
25°	529	556	598	664	722	242
35°	318	345	401	494	577	197
45°	114	143	225	338	420	97
55°	58	61	94	178	240	52
65°	27	39	50	56	66	28
75°	14	26	25	24	24	15
85°	6	13	14	13	10	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	919.8	919.8	919.8	919.8	919.8
2.5°	909.5	920.9	912.9	914.0	916.3
5°	886.6	901.5	900.3	909.5	918.6
7.5°	854.6	871.8	880.9	894.6	907.2
10°	818.1	837.5	848.9	874.0	892.3
12.5°	775.8	800.9	815.8	848.9	875.2
15°	731.2	757.5	778.1	821.5	852.3
17.5°	681.0	709.5	735.8	787.2	824.9
20°	633.0	660.4	692.4	748.4	794.1
22.5°	580.4	610.1	646.7	706.1	757.5
25°	529.0	556.4	597.6	663.8	722.1
27.5°	477.6	505.0	548.4	621.5	685.5
30°	423.9	452.4	498.2	579.3	649.0
32.5°	371.3	398.7	450.2	538.1	611.3
35°	317.6	345.0	401.0	493.6	577.0
37.5°	265.1	293.6	353.0	457.0	542.7
40°	210.2	241.1	308.5	419.3	506.1
42.5°	158.8	191.9	263.9	380.5	466.2
45°	114.3	142.8	225.1	338.2	420.5
47.5°	89.1	104.0	189.7	294.8	378.2
50°	77.7	80.0	155.4	254.8	334.8
52.5°	67.4	69.7	122.3	217.1	289.1
55°	58.3	60.6	93.7	178.2	239.9
57.5°	49.1	52.6	77.7	141.7	193.1
60°	41.1	45.7	69.7	108.5	148.5
62.5°	33.1	41.1	59.4	80.0	106.3
65°	27.4	38.8	50.3	56.0	66.3
67.5°	22.9	35.4	42.3	40.0	38.8
70°	19.4	32.0	35.4	32.0	33.1
72.5°	16.0	29.7	29.7	27.4	27.4
75°	13.7	26.3	25.1	24.0	24.0
77.5°	11.4	22.9	21.7	20.6	19.4
80°	9.1	18.3	18.3	17.1	16.0
82.5°	8.0	14.9	14.9	14.9	12.6
85°	5.7	12.6	13.7	12.6	10.3
87.5°	4.6	11.4	11.4	10.3	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)