

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: P1059351

Luminaire Tested: S123RDR-S775D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059351  
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-S775D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

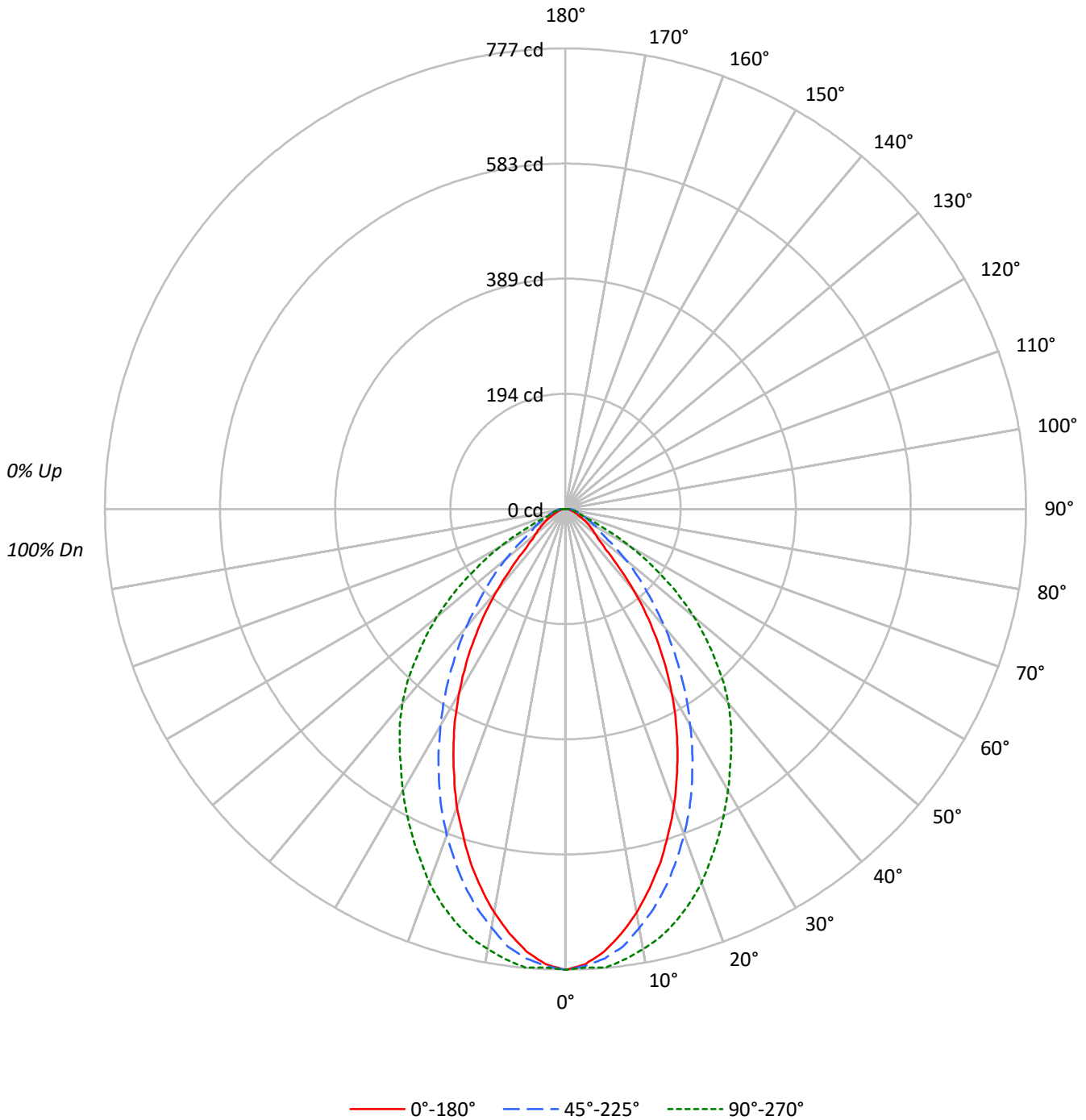
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1043.6 lumens  
Efficiency: N/A  
Efficacy: 40.5 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): 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	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°	9129	9129	9129
5°	8833	8970	9153
10°	8245	8556	8994
15°	7514	7995	8759
20°	6685	7313	8387
25°	5793	6544	7909
30°	4858	5710	7438
35°	3849	4860	6991
40°	2724	3998	6558
45°	1604	3160	5902
50°	1200	2399	5170
55°	1009	1621	4152
60°	817	1383	2947
65°	645	1181	1556
70°	563	1027	961
75°	526	962	921
80°	521	1048	913
85°	647	1563	1172

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5902 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.5	6.9
10°-20°	186.0	17.8
20°-30°	236.8	22.7
30°-40°	222.8	21.3
40°-50°	160.4	15.4
50°-60°	92.7	8.9
60°-70°	42.3	4.1
70°-80°	21.1	2.0
80°-90°	10.0	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°	494.3	47.4
0°-40°	717.1	68.7
0°-60°	970.1	93.0
0°-90°	1043.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1043.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	749	762	761	769	776	70
15°	618	640	658	694	720	172
25°	447	470	505	561	610	205
35°	268	292	339	417	488	167
45°	97	121	190	286	355	82
55°	49	51	79	151	203	44
65°	23	33	42	47	56	24
75°	12	22	21	20	20	12
85°	5	11	12	11	9	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	777.4	777.4	777.4	777.4	777.4
2.5°	768.7	778.4	771.6	772.6	774.5
5°	749.4	762.0	761.0	768.7	776.5
7.5°	722.4	736.9	744.6	756.2	766.8
10°	691.5	707.9	717.6	738.8	754.3
12.5°	655.7	677.0	689.6	717.6	739.8
15°	618.1	640.3	657.7	694.4	720.5
17.5°	575.6	599.7	621.9	665.4	697.3
20°	535.0	558.2	585.2	632.6	671.2
22.5°	490.6	515.7	546.6	596.8	640.3
25°	447.1	470.3	505.1	561.1	610.4
27.5°	403.7	426.9	463.6	525.4	579.5
30°	358.3	382.4	421.1	489.6	548.6
32.5°	313.9	337.0	380.5	454.9	516.7
35°	268.5	291.7	339.0	417.2	487.7
37.5°	224.1	248.2	298.4	386.3	458.7
40°	177.7	203.8	260.8	354.4	427.8
42.5°	134.2	162.2	223.1	321.6	394.0
45°	96.6	120.7	190.3	285.9	355.4
47.5°	75.3	87.9	160.3	249.2	319.7
50°	65.7	67.6	131.3	215.4	283.0
52.5°	57.0	58.9	103.3	183.5	244.3
55°	49.3	51.2	79.2	150.7	202.8
57.5°	41.5	44.4	65.7	119.8	163.2
60°	34.8	38.6	58.9	91.7	125.5
62.5°	28.0	34.8	50.2	67.6	89.8
65°	23.2	32.8	42.5	47.3	56.0
67.5°	19.3	29.9	35.7	33.8	32.8
70°	16.4	27.0	29.9	27.0	28.0
72.5°	13.5	25.1	25.1	23.2	23.2
75°	11.6	22.2	21.2	20.3	20.3
77.5°	9.7	19.3	18.3	17.4	16.4
80°	7.7	15.5	15.5	14.5	13.5
82.5°	6.8	12.6	12.6	12.6	10.6
85°	4.8	10.6	11.6	10.6	8.7
87.5°	3.9	9.7	9.7	8.7	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)