

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: P1060301

Luminaire Tested: S124RDR-S1195D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060301  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1195D830-X4F0-XX-UDD-BVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

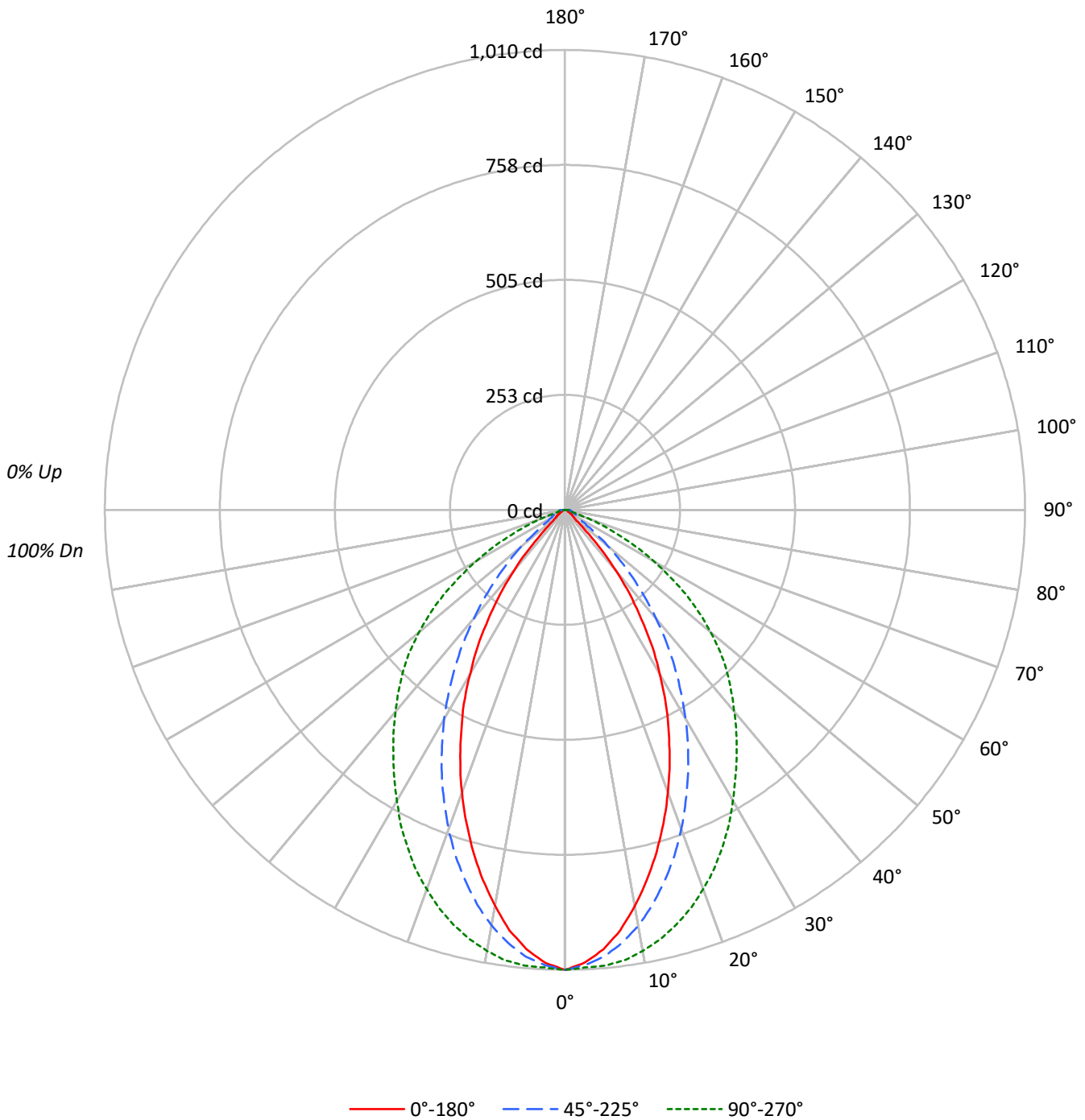
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1267.7 lumens  
Efficiency: N/A  
Efficacy: 30.3 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97  
Luminous Opening: Rectangular (W 0.31' 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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	8698	8698	8698
5°	8373	8512	8686
10°	7721	8107	8599
15°	6930	7526	8409
20°	6056	6841	8128
25°	5123	6076	7767
30°	4137	5268	7330
35°	3080	4403	6905
40°	1955	3489	6497
45°	782	2557	6126
50°	340	1630	5592
55°	261	844	4881
60°	184	575	3872
65°	137	573	2645
70°	136	506	1214
75°	180	536	489
80°	268	595	531
85°	534	1057	790

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6126 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.4	7.3
10°-20°	238.5	18.8
20°-30°	301.2	23.8
30°-40°	276.7	21.8
40°-50°	188.6	14.9
50°-60°	102.3	8.1
60°-70°	43.4	3.4
70°-80°	15.0	1.2
80°-90°	9.5	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°	632.2	49.9
0°-40°	908.8	71.7
0°-60°	1199.8	94.6
0°-90°	1267.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1267.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	969	983	985	993	1005	90
15°	777	803	844	904	943	217
25°	539	574	640	738	818	247
35°	293	332	419	550	657	182
45°	64	103	210	372	503	59
55°	17	19	56	205	325	16
65°	7	8	28	64	130	7
75°	5	15	16	15	15	6
85°	5	11	11	11	8	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1010.1	1010.1	1010.1	1010.1	1010.1
2.5°	995.4	1007.4	1000.7	1003.4	1006.1
5°	968.6	983.4	984.7	992.7	1004.8
7.5°	931.2	948.6	959.3	979.3	998.1
10°	883.0	904.4	927.2	959.3	983.4
12.5°	832.2	854.9	888.4	933.8	966.0
15°	777.3	802.7	844.2	904.4	943.2
17.5°	719.8	747.9	797.4	868.3	917.8
20°	660.9	691.7	746.5	826.8	887.0
22.5°	600.7	632.8	693.0	784.0	854.9
25°	539.2	574.0	639.5	738.5	817.5
27.5°	480.3	512.4	584.7	693.0	780.0
30°	416.1	452.2	529.8	646.2	737.2
32.5°	357.2	392.0	473.6	598.0	697.0
35°	293.0	331.8	418.8	549.9	656.9
37.5°	232.8	270.3	365.2	504.4	618.1
40°	173.9	212.7	310.4	458.9	578.0
42.5°	116.4	157.9	258.2	412.1	540.5
45°	64.2	103.0	210.0	371.9	503.0
47.5°	33.4	56.2	164.6	331.8	462.9
50°	25.4	30.8	121.7	287.6	417.4
52.5°	21.4	22.7	82.9	243.5	371.9
55°	17.4	18.7	56.2	204.7	325.1
57.5°	13.4	14.7	40.1	167.2	272.9
60°	10.7	12.0	33.4	128.4	224.8
62.5°	8.0	9.4	32.1	95.0	176.6
65°	6.7	8.0	28.1	64.2	129.8
67.5°	5.4	8.0	24.1	41.5	87.0
70°	5.4	10.7	20.1	26.8	48.2
72.5°	5.4	12.0	17.4	17.4	17.4
75°	5.4	14.7	16.1	14.7	14.7
77.5°	5.4	13.4	13.4	13.4	13.4
80°	5.4	12.0	12.0	12.0	10.7
82.5°	5.4	10.7	12.0	12.0	9.4
85°	5.4	10.7	10.7	10.7	8.0
87.5°	4.0	10.7	10.7	10.7	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)