

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: P1060332

Luminaire Tested: S124RDR-S1195D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060332  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1195D850-X4F0-XX-UDD-SVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

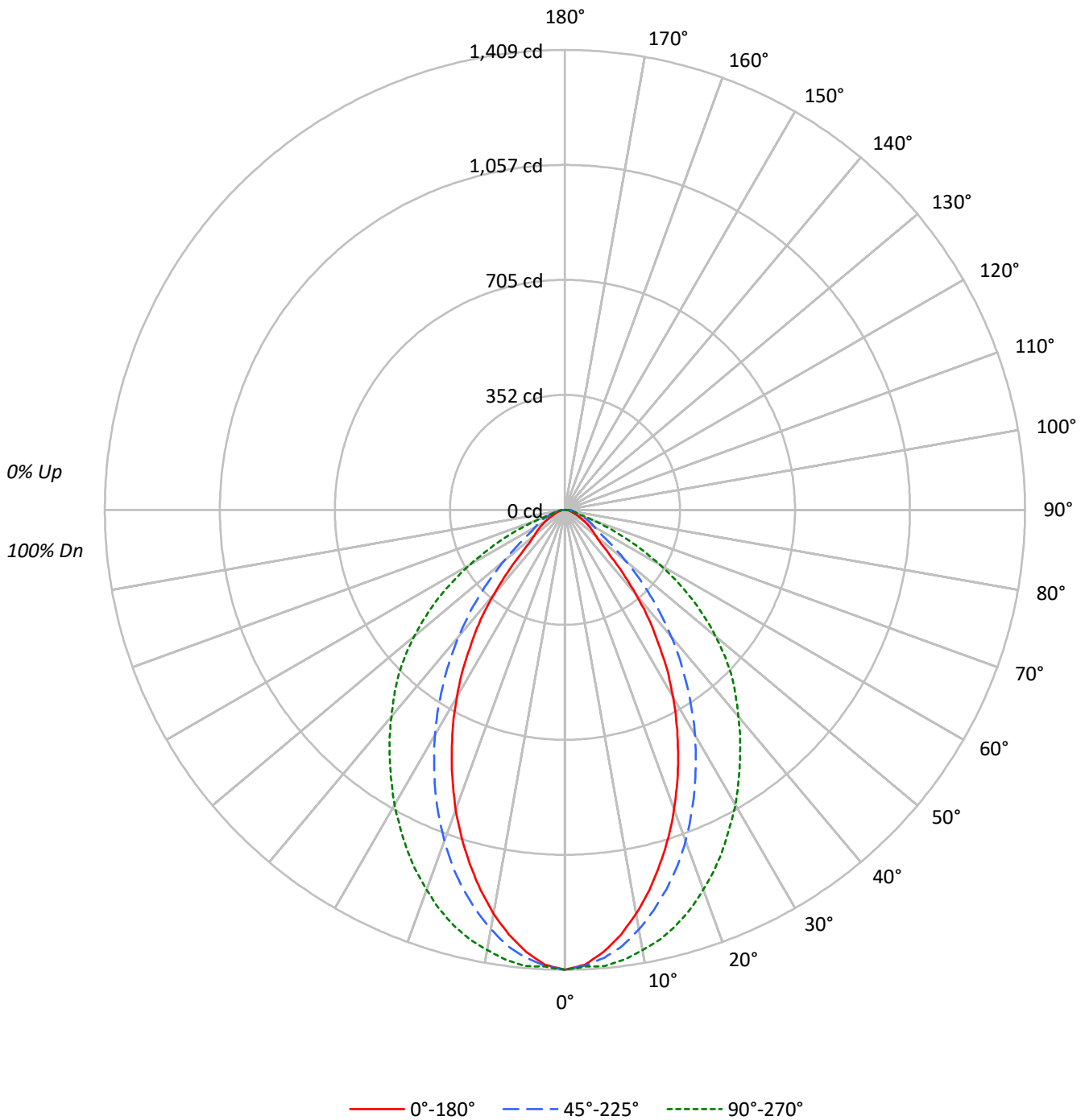
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1994.0 lumens  
Efficiency: N/A  
Efficacy: 47.7 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79			79	
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70			70	
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63			63	
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57			57	
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51			51	
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47			47	
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43			43	
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39			39	
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36			36	

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

	0°	45°	90°
0°	12132	12132	12132
5°	11757	11906	12124
10°	10984	11411	11975
15°	10019	10721	11746
20°	8958	9896	11352
25°	7792	8944	10889
30°	6574	7920	10378
35°	5229	6817	9829
40°	3804	5680	9290
45°	2300	4485	8799
50°	1645	3247	8055
55°	1395	2198	7113
60°	1138	1789	5747
65°	899	1604	4138
70°	753	1347	2180
75°	682	1258	1101
80°	704	1250	1091
85°	929	1867	1245

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8799 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.7	6.5
10°-20°	339.9	17.0
20°-30°	440.8	22.1
30°-40°	424.3	21.3
40°-50°	315.7	15.8
50°-60°	194.1	9.7
60°-70°	95.3	4.8
70°-80°	37.2	1.9
80°-90°	17.0	0.9
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°	910.4	45.7
0°-40°	1334.7	66.9
0°-60°	1844.5	92.5
0°-90°	1994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1994.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1409	1409	1409	1409	1409	
5°	1360	1380	1377	1390	1403	127
15°	1124	1160	1203	1275	1318	314
25°	820	864	941	1059	1146	375
35°	497	545	648	811	935	311
45°	189	234	368	568	722	157
55°	93	96	146	334	474	84
65°	44	47	79	126	203	45
75°	20	36	38	35	33	22
85°	9	17	19	19	13	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1408.9	1408.9	1408.9	1408.9	1408.9
2.5°	1394.7	1410.4	1397.8	1399.4	1401.0
5°	1360.1	1380.5	1377.4	1390.0	1402.6
7.5°	1312.8	1336.4	1347.5	1372.6	1390.0
10°	1256.2	1282.9	1305.0	1345.9	1369.5
12.5°	1193.2	1224.7	1256.2	1311.3	1347.5
15°	1123.9	1160.1	1202.6	1275.1	1317.6
17.5°	1053.1	1089.3	1144.4	1227.8	1281.3
20°	977.5	1016.9	1079.9	1172.7	1238.8
22.5°	898.8	941.3	1010.6	1116.1	1194.8
25°	820.1	864.2	941.3	1059.4	1146.0
27.5°	741.4	783.9	867.3	999.6	1094.0
30°	661.1	705.2	796.5	935.0	1043.7
32.5°	584.0	624.9	722.5	873.6	988.6
35°	497.4	544.7	648.5	810.7	935.0
37.5°	423.4	465.9	577.7	747.7	881.5
40°	338.4	385.7	505.3	686.3	826.4
42.5°	259.7	307.0	436.0	624.9	774.5
45°	188.9	234.5	368.3	568.3	722.5
47.5°	143.2	170.0	302.2	513.2	664.3
50°	122.8	130.7	242.4	453.4	601.3
52.5°	108.6	111.8	188.9	393.5	538.4
55°	92.9	96.0	146.4	333.7	473.8
57.5°	78.7	80.3	118.1	277.0	404.6
60°	66.1	67.7	103.9	222.0	333.7
62.5°	55.1	56.7	92.9	171.6	266.0
65°	44.1	47.2	78.7	125.9	203.1
67.5°	36.2	42.5	66.1	88.2	141.7
70°	29.9	40.9	53.5	61.4	86.6
72.5°	25.2	37.8	45.6	44.1	42.5
75°	20.5	36.2	37.8	34.6	33.1
77.5°	17.3	31.5	31.5	28.3	26.8
80°	14.2	25.2	25.2	25.2	22.0
82.5°	12.6	20.5	22.0	22.0	17.3
85°	9.4	17.3	18.9	18.9	12.6
87.5°	6.3	15.7	17.3	15.7	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)