

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: P1060323

Luminaire Tested: S124RDR-S1195D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060323  
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-S1195D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

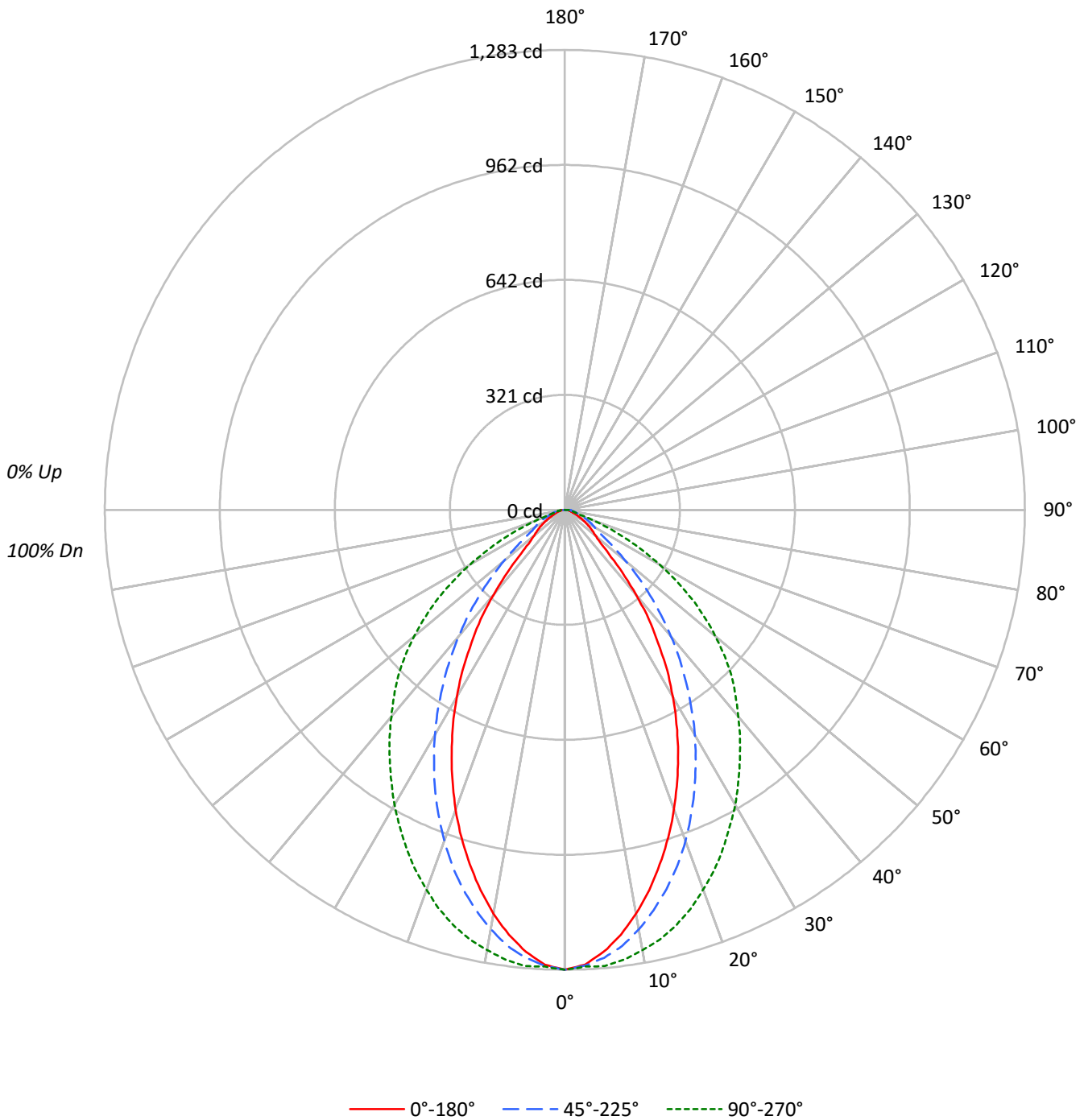
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1815.8 lumens  
Efficiency: N/A  
Efficacy: 43.4 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°	11047	11047	11047
5°	10706	10841	11040
10°	10002	10390	10905
15°	9124	9763	10696
20°	8158	9011	10338
25°	7096	8145	9915
30°	5986	7212	9450
35°	4762	6209	8951
40°	3464	5172	8459
45°	2095	4084	8012
50°	1498	2957	7336
55°	1270	2001	6478
60°	1037	1629	5234
65°	817	1461	3767
70°	685	1226	1984
75°	619	1145	1001
80°	640	1136	997
85°	850	1699	1136

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8012 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.1	6.5
10°-20°	309.5	17.0
20°-30°	401.4	22.1
30°-40°	386.4	21.3
40°-50°	287.4	15.8
50°-60°	176.8	9.7
60°-70°	86.8	4.8
70°-80°	33.9	1.9
80°-90°	15.4	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°	829.0	45.7
0°-40°	1215.4	66.9
0°-60°	1679.7	92.5
0°-90°	1815.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1815.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1238	1257	1254	1266	1277	115
15°	1024	1056	1095	1161	1200	286
25°	747	787	857	965	1044	342
35°	453	496	591	738	852	283
45°	172	214	335	518	658	143
55°	85	87	133	304	432	76
65°	40	43	72	115	185	41
75°	19	33	34	32	30	20
85°	9	16	17	17	12	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1282.9	1282.9	1282.9	1282.9	1282.9
2.5°	1270.0	1284.3	1272.9	1274.3	1275.7
5°	1238.5	1257.1	1254.2	1265.7	1277.2
7.5°	1195.5	1217.0	1227.0	1249.9	1265.7
10°	1143.9	1168.2	1188.3	1225.6	1247.1
12.5°	1086.5	1115.2	1143.9	1194.0	1227.0
15°	1023.5	1056.4	1095.1	1161.1	1199.8
17.5°	959.0	991.9	1042.1	1118.1	1166.8
20°	890.2	926.0	983.3	1067.9	1128.1
22.5°	818.5	857.2	920.3	1016.3	1088.0
25°	746.8	786.9	857.2	964.7	1043.5
27.5°	675.1	713.8	789.8	910.2	996.2
30°	602.0	642.2	725.3	851.5	950.4
32.5°	531.8	569.1	657.9	795.5	900.2
35°	453.0	496.0	590.6	738.2	851.5
37.5°	385.6	424.3	526.1	680.9	802.7
40°	308.2	351.2	460.1	625.0	752.5
42.5°	236.5	279.5	397.1	569.1	705.2
45°	172.0	213.6	335.4	517.5	657.9
47.5°	130.4	154.8	275.2	467.3	604.9
50°	111.8	119.0	220.7	412.8	547.6
52.5°	98.9	101.8	172.0	358.4	490.2
55°	84.6	87.4	133.3	303.9	431.5
57.5°	71.7	73.1	107.5	252.3	368.4
60°	60.2	61.6	94.6	202.1	303.9
62.5°	50.2	51.6	84.6	156.2	242.2
65°	40.1	43.0	71.7	114.7	184.9
67.5°	33.0	38.7	60.2	80.3	129.0
70°	27.2	37.3	48.7	55.9	78.8
72.5°	22.9	34.4	41.6	40.1	38.7
75°	18.6	33.0	34.4	31.5	30.1
77.5°	15.8	28.7	28.7	25.8	24.4
80°	12.9	22.9	22.9	22.9	20.1
82.5°	11.5	18.6	20.1	20.1	15.8
85°	8.6	15.8	17.2	17.2	11.5
87.5°	5.7	14.3	15.8	14.3	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)