

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: P1060320

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060320  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1195D840-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

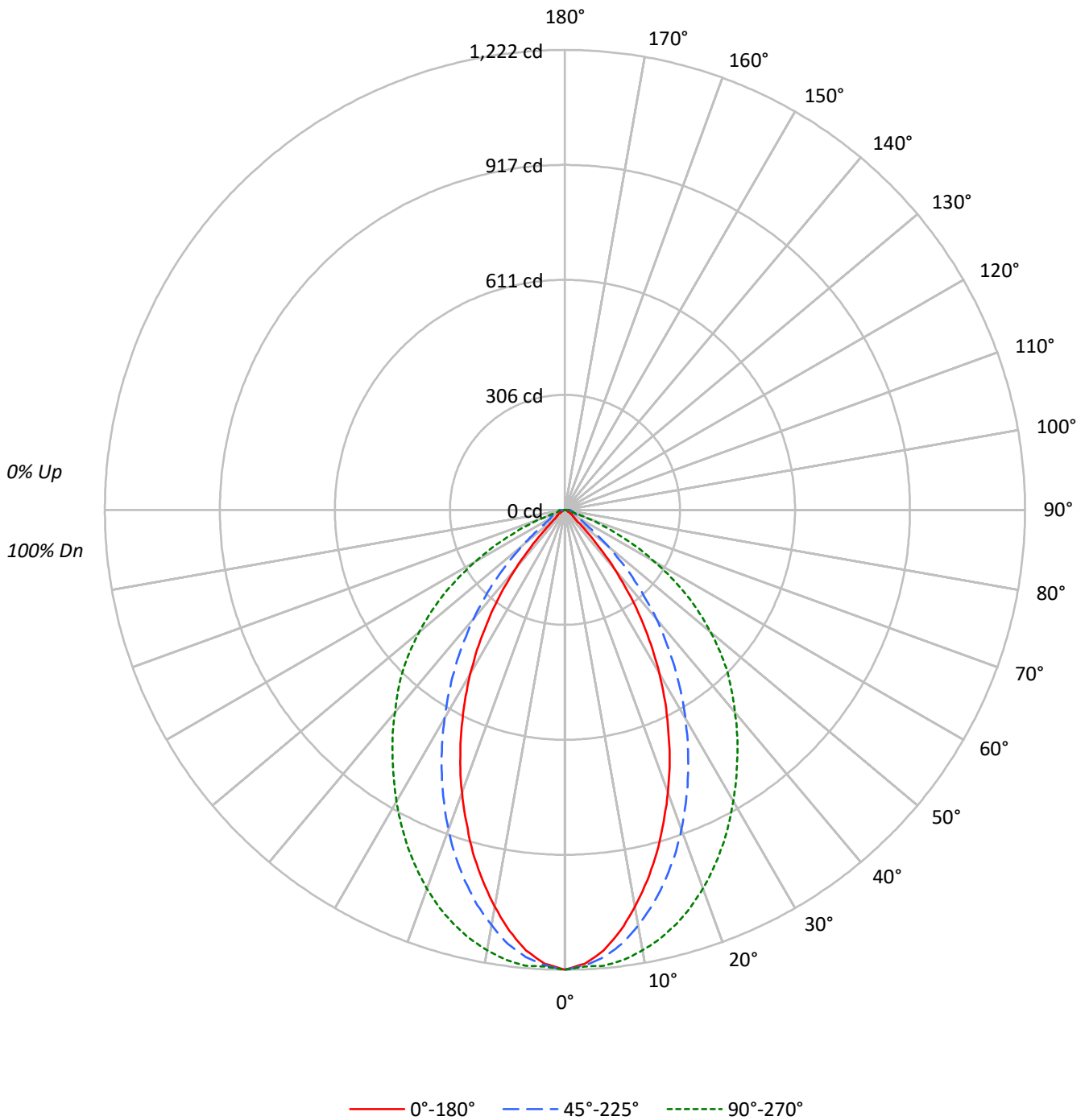
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1539.6 lumens  
Efficiency: N/A  
Efficacy: 36.8 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96  
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	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

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

	0°	45°	90°
0°	10519	10519	10519
5°	10163	10311	10509
10°	9365	9804	10393
15°	8410	9114	10161
20°	7331	8290	9814
25°	6184	7356	9386
30°	4990	6359	8896
35°	3693	5320	8395
40°	2289	4239	7897
45°	908	3091	7438
50°	403	1940	6761
55°	323	1012	5920
60°	222	765	4715
65°	147	760	3242
70°	144	685	1516
75°	190	669	669
80°	283	784	784
85°	563	1561	1136

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7438 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.1	7.3
10°-20°	289.2	18.8
20°-30°	365.0	23.7
30°-40°	334.9	21.8
40°-50°	228.1	14.8
50°-60°	124.3	8.1
60°-70°	53.8	3.5
70°-80°	19.6	1.3
80°-90°	12.6	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°	766.3	49.8
0°-40°	1101.2	71.5
0°-60°	1453.6	94.4
0°-90°	1539.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1539.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1222	1222	1222	1222	1222	
5°	1176	1191	1193	1206	1216	109
15°	943	976	1022	1095	1140	262
25°	651	697	774	898	988	297
35°	351	403	506	667	799	217
45°	75	125	254	450	611	69
55°	22	23	67	248	394	19
65°	7	10	37	77	159	8
75°	6	19	20	20	20	6
85°	6	13	16	16	12	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1221.6	1221.6	1221.6	1221.6	1221.6
2.5°	1207.2	1221.6	1211.5	1214.4	1214.4
5°	1175.7	1191.4	1192.9	1205.8	1215.8
7.5°	1128.4	1151.3	1162.8	1188.6	1205.8
10°	1071.0	1098.3	1121.2	1165.6	1188.6
12.5°	1009.4	1040.9	1075.3	1134.1	1167.1
15°	943.4	976.4	1022.3	1095.4	1139.8
17.5°	870.3	910.4	966.3	1053.8	1108.3
20°	800.0	840.2	904.7	1003.6	1071.0
22.5°	726.9	768.5	840.2	950.6	1030.9
25°	650.9	696.8	774.2	897.5	987.9
27.5°	576.4	625.1	706.8	841.6	942.0
30°	501.8	550.6	639.5	784.3	894.7
32.5°	425.8	476.0	572.1	724.0	845.9
35°	351.3	402.9	506.1	666.7	798.6
37.5°	275.3	329.8	440.2	610.8	751.3
40°	203.6	258.1	377.1	554.9	702.5
42.5°	136.2	190.7	312.6	500.4	656.7
45°	74.6	124.7	253.8	450.2	610.8
47.5°	40.1	68.8	196.4	401.5	559.2
50°	30.1	37.3	144.8	349.8	504.7
52.5°	25.8	28.7	100.4	295.4	450.2
55°	21.5	22.9	67.4	248.0	394.3
57.5°	17.2	18.6	50.2	200.7	334.1
60°	12.9	15.8	44.4	154.8	273.8
62.5°	10.0	12.9	41.6	113.3	216.5
65°	7.2	10.0	37.3	77.4	159.1
67.5°	7.2	11.5	31.5	50.2	107.5
70°	5.7	15.8	27.2	33.0	60.2
72.5°	5.7	17.2	22.9	22.9	22.9
75°	5.7	18.6	20.1	20.1	20.1
77.5°	5.7	17.2	18.6	17.2	17.2
80°	5.7	15.8	15.8	15.8	15.8
82.5°	5.7	14.3	15.8	15.8	12.9
85°	5.7	12.9	15.8	15.8	11.5
87.5°	4.3	12.9	14.3	14.3	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)