

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: P1060309

Luminaire Tested: S124RDR-S1195D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060309  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1195D835-X4F0-XX-UDD-BVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

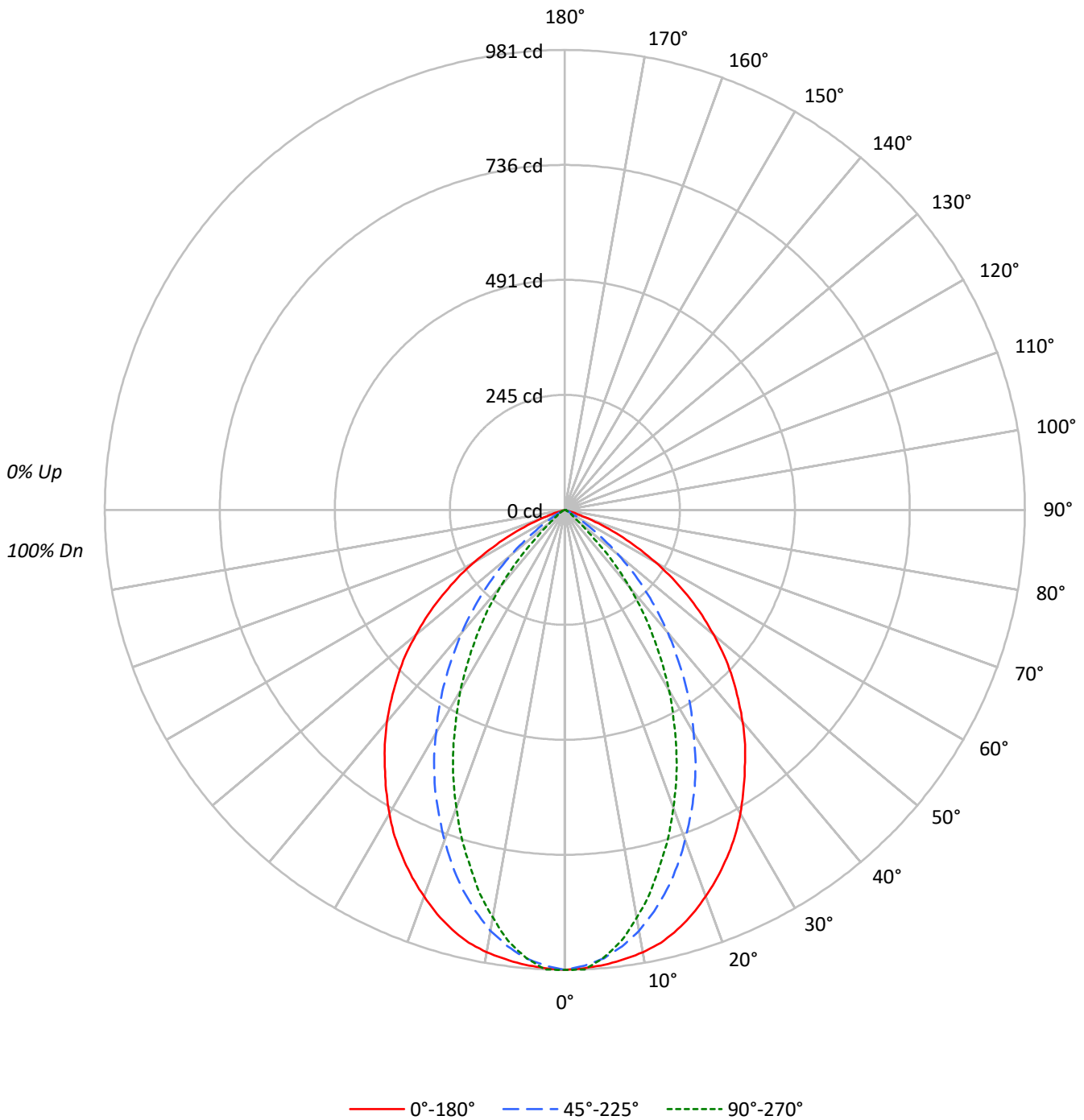
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1281.2 lumens  
Efficiency: N/A  
Efficacy: 30.7 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98  
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				
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91				
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55				
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42				
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39				

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

	0°	45°	90°
0°	8449	8449	8449
5°	8420	8297	8285
10°	8381	7972	7724
15°	8267	7483	6990
20°	8043	6874	6197
25°	7773	6224	5348
30°	7445	5456	4427
35°	7035	4680	3443
40°	6630	3841	2407
45°	6147	2953	1191
50°	5546	1995	399
55°	4789	1022	276
60°	3834	367	195
65°	2628	202	88
70°	1178	108	70
75°	0	47	47
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6147 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	7.1
10°-20°	237.5	18.5
20°-30°	307.5	24.0
30°-40°	292.1	22.8
40°-50°	206.9	16.1
50°-60°	106.2	8.3
60°-70°	37.1	2.9
70°-80°	3.2	0.3
80°-90°	0.0	0.0
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°	635.6	49.6
0°-40°	927.8	72.4
0°-60°	1240.9	96.9
0°-90°	1281.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1281.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	981	981	981	981	981	
5°	974	976	960	960	958	92
15°	927	899	839	800	784	261
25°	818	754	655	586	563	376
35°	669	571	445	359	328	419
45°	505	388	242	139	98	389
55°	319	210	68	20	18	285
65°	129	62	10	6	4	128
75°	0	1	1	1	1	11
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	981.2	981.2	981.2	981.2	981.2
2.5°	978.4	981.2	972.7	979.8	981.2
5°	974.1	975.5	959.9	959.9	958.5
7.5°	967.0	964.2	938.7	928.7	927.3
10°	958.5	948.6	911.7	890.4	883.4
12.5°	945.7	927.3	877.7	846.5	838.0
15°	927.3	898.9	839.4	799.7	784.1
17.5°	904.6	867.8	796.9	748.7	733.1
20°	877.7	830.9	750.1	696.2	676.3
22.5°	849.3	795.4	701.9	640.9	621.0
25°	818.1	754.3	655.1	585.6	562.9
27.5°	785.5	710.4	604.0	531.7	501.9
30°	748.7	666.4	548.7	473.6	445.2
32.5°	709.0	618.2	499.1	418.3	384.3
35°	669.2	571.4	445.2	358.7	327.5
37.5°	631.0	527.5	391.3	300.6	270.8
40°	589.8	479.3	341.7	248.1	214.1
42.5°	547.3	432.5	290.7	194.3	157.4
45°	504.8	388.5	242.5	139.0	97.8
47.5°	462.2	341.7	195.7	87.9	52.5
50°	414.0	296.3	148.9	46.8	29.8
52.5°	368.7	253.8	106.3	26.9	22.7
55°	319.0	209.8	68.1	19.9	18.4
57.5°	272.2	167.3	38.3	15.6	14.2
60°	222.6	129.0	21.3	12.8	11.3
62.5°	173.0	93.6	14.2	8.5	7.1
65°	129.0	62.4	9.9	5.7	4.3
67.5°	85.1	35.4	7.1	2.8	2.8
70°	46.8	17.0	4.3	2.8	2.8
72.5°	17.0	5.7	2.8	1.4	1.4
75°	0.0	1.4	1.4	1.4	1.4
77.5°	0.0	0.0	0.0	0.0	1.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)