

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: P1060328

Luminaire Tested: S124RDR-S1195D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060328  
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-S1195D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

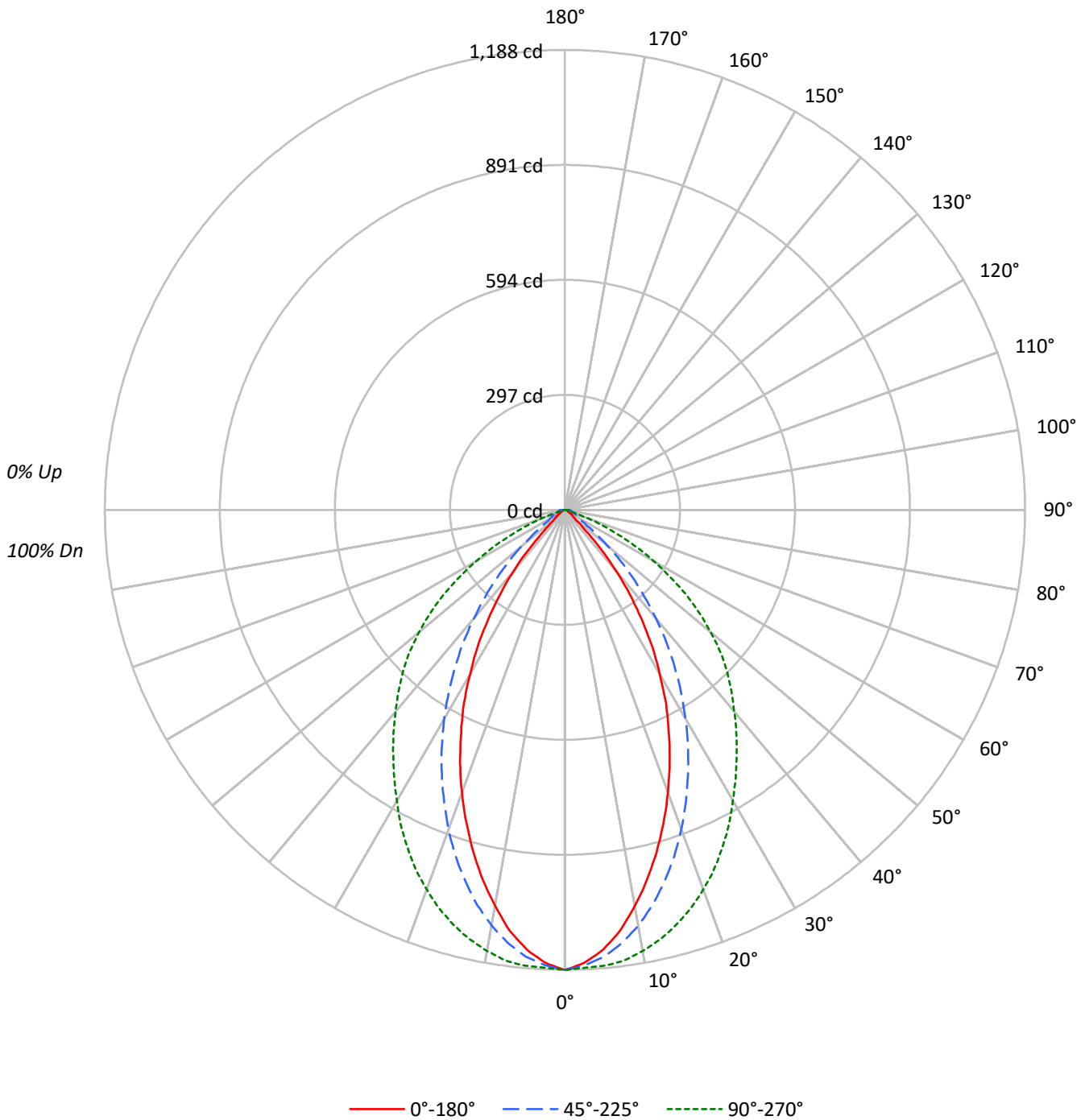
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1491.6 lumens  
Efficiency: N/A  
Efficacy: 35.7 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	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	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°	10234	10234	10234
5°	9852	10015	10219
10°	9085	9539	10117
15°	8154	8855	9894
20°	7126	8049	9564
25°	6028	7150	9138
30°	4868	6199	8625
35°	3624	5179	8125
40°	2300	4105	7644
45°	921	3009	7208
50°	401	1918	6579
55°	308	992	5742
60°	217	679	4555
65°	161	674	3111
70°	159	594	1428
75°	210	629	576
80°	312	704	625
85°	622	1245	929

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7208 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.8	7.3
10°-20°	280.6	18.8
20°-30°	354.4	23.8
30°-40°	325.5	21.8
40°-50°	222.0	14.9
50°-60°	120.4	8.1
60°-70°	51.1	3.4
70°-80°	17.7	1.2
80°-90°	11.2	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°	743.8	49.9
0°-40°	1069.3	71.7
0°-60°	1411.7	94.6
0°-90°	1491.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1491.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1188	1188	1188	1188	1188	
5°	1140	1157	1159	1168	1182	106
15°	915	944	993	1064	1110	255
25°	634	675	752	869	962	290
35°	345	390	493	647	773	214
45°	76	121	247	438	592	70
55°	20	22	66	241	382	18
65°	8	9	33	76	153	8
75°	6	17	19	17	17	7
85°	6	13	13	13	9	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1188.5	1188.5	1188.5	1188.5	1188.5
2.5°	1171.2	1185.4	1177.5	1180.6	1183.8
5°	1139.7	1157.0	1158.6	1168.0	1182.2
7.5°	1095.6	1116.1	1128.7	1152.3	1174.3
10°	1039.0	1064.1	1090.9	1128.7	1157.0
12.5°	979.1	1005.9	1045.3	1098.8	1136.6
15°	914.6	944.5	993.3	1064.1	1109.8
17.5°	846.9	880.0	938.2	1021.6	1079.9
20°	777.6	813.8	878.4	972.8	1043.7
22.5°	706.8	744.6	815.4	922.5	1005.9
25°	634.4	675.3	752.5	868.9	961.8
27.5°	565.1	602.9	687.9	815.4	917.7
30°	489.6	532.1	623.4	760.3	867.4
32.5°	420.3	461.2	557.3	703.7	820.1
35°	344.7	390.4	492.7	647.0	772.9
37.5°	273.9	318.0	429.7	593.5	727.3
40°	204.6	250.3	365.2	539.9	680.0
42.5°	137.0	185.8	303.8	484.8	636.0
45°	75.6	121.2	247.1	437.6	591.9
47.5°	39.4	66.1	193.6	390.4	544.7
50°	29.9	36.2	143.2	338.4	491.1
52.5°	25.2	26.8	97.6	286.5	437.6
55°	20.5	22.0	66.1	240.8	382.5
57.5°	15.7	17.3	47.2	196.8	321.1
60°	12.6	14.2	39.4	151.1	264.5
62.5°	9.4	11.0	37.8	111.8	207.8
65°	7.9	9.4	33.1	75.6	152.7
67.5°	6.3	9.4	28.3	48.8	102.3
70°	6.3	12.6	23.6	31.5	56.7
72.5°	6.3	14.2	20.5	20.5	20.5
75°	6.3	17.3	18.9	17.3	17.3
77.5°	6.3	15.7	15.7	15.7	15.7
80°	6.3	14.2	14.2	14.2	12.6
82.5°	6.3	12.6	14.2	14.2	11.0
85°	6.3	12.6	12.6	12.6	9.4
87.5°	4.7	12.6	12.6	12.6	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)