

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: P1060329

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060329  
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-S1195D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

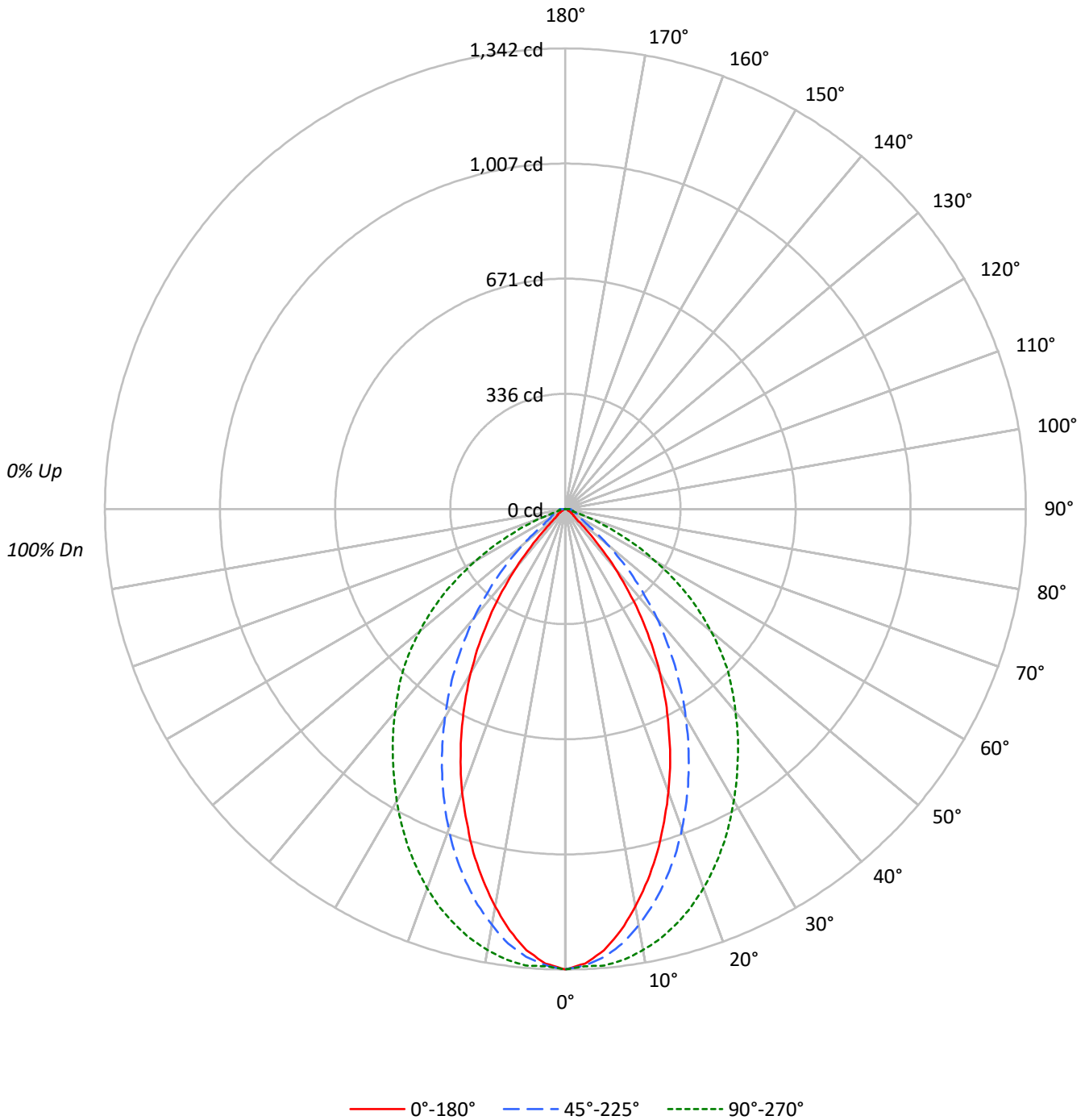
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1690.7 lumens  
Efficiency: N/A  
Efficacy: 40.4 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

TEST NUMBER: P1060329

CATALOG NUMBER: S124RDR-S1195D850-X4F0-XX-UDD-BVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1060329

CATALOG NUMBER: S124RDR-S1195D850-X4F0-XX-UDD-BVL-W

**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	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°	11552	11552	11552
5°	11160	11324	11542
10°	10285	10766	11414
15°	9236	10008	11159
20°	8051	9104	10778
25°	6792	8078	10307
30°	5480	6982	9769
35°	4056	5843	9219
40°	2513	4655	8672
45°	997	3394	8168
50°	443	2130	7424
55°	354	1111	6501
60°	245	840	5179
65°	161	833	3562
70°	159	753	1664
75°	210	732	732
80°	312	858	858
85°	622	1709	1245

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8168 cd/sqm



TEST NUMBER: P1060329

CATALOG NUMBER: S124RDR-S1195D850-X4F0-XX-UDD-BVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.1	7.3
10°-20°	317.6	18.8
20°-30°	400.9	23.7
30°-40°	367.8	21.8
40°-50°	250.5	14.8
50°-60°	136.4	8.1
60°-70°	59.0	3.5
70°-80°	21.5	1.3
80°-90°	13.9	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°	841.5	49.8
0°-40°	1209.3	71.5
0°-60°	1596.2	94.4
0°-90°	1690.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1690.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1342	1342	1342	1342	1342	
5°	1291	1308	1310	1324	1335	120
15°	1036	1072	1123	1203	1252	288
25°	715	765	850	986	1085	327
35°	386	442	556	732	877	238
45°	82	137	279	494	671	76
55°	24	25	74	272	433	21
65°	8	11	41	85	175	9
75°	6	20	22	22	22	7
85°	6	14	17	17	13	6
90°	0	0	0	0	0	



TEST NUMBER: P1060329

CATALOG NUMBER: S124RDR-S1195D850-X4F0-XX-UDD-BVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1341.5	1341.5	1341.5	1341.5	1341.5
2.5°	1325.7	1341.5	1330.5	1333.6	1333.6
5°	1291.1	1308.4	1310.0	1324.2	1335.2
7.5°	1239.1	1264.3	1276.9	1305.3	1324.2
10°	1176.2	1206.1	1231.3	1280.1	1305.3
12.5°	1108.4	1143.1	1180.9	1245.4	1281.6
15°	1036.0	1072.2	1122.6	1202.9	1251.7
17.5°	955.7	999.8	1061.2	1157.3	1217.1
20°	878.6	922.7	993.5	1102.1	1176.2
22.5°	798.3	843.9	922.7	1043.9	1132.1
25°	714.8	765.2	850.2	985.6	1084.8
27.5°	632.9	686.5	776.2	924.2	1034.4
30°	551.1	604.6	702.2	861.3	982.5
32.5°	467.6	522.7	628.2	795.1	929.0
35°	385.8	442.4	555.8	732.1	877.0
37.5°	302.3	362.1	483.4	670.7	825.0
40°	223.6	283.4	414.1	609.3	771.5
42.5°	149.6	209.4	343.2	549.5	721.1
45°	81.9	137.0	278.7	494.4	670.7
47.5°	44.1	75.6	215.7	440.9	614.1
50°	33.1	40.9	159.0	384.2	554.2
52.5°	28.3	31.5	110.2	324.3	494.4
55°	23.6	25.2	74.0	272.4	433.0
57.5°	18.9	20.5	55.1	220.4	366.9
60°	14.2	17.3	48.8	170.0	300.7
62.5°	11.0	14.2	45.7	124.4	237.7
65°	7.9	11.0	40.9	85.0	174.8
67.5°	7.9	12.6	34.6	55.1	118.1
70°	6.3	17.3	29.9	36.2	66.1
72.5°	6.3	18.9	25.2	25.2	25.2
75°	6.3	20.5	22.0	22.0	22.0
77.5°	6.3	18.9	20.5	18.9	18.9
80°	6.3	17.3	17.3	17.3	17.3
82.5°	6.3	15.7	17.3	17.3	14.2
85°	6.3	14.2	17.3	17.3	12.6
87.5°	4.7	14.2	15.7	15.7	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)