

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: P1060305

Luminaire Tested: S124RDR-S1195D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060305
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-S1195D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

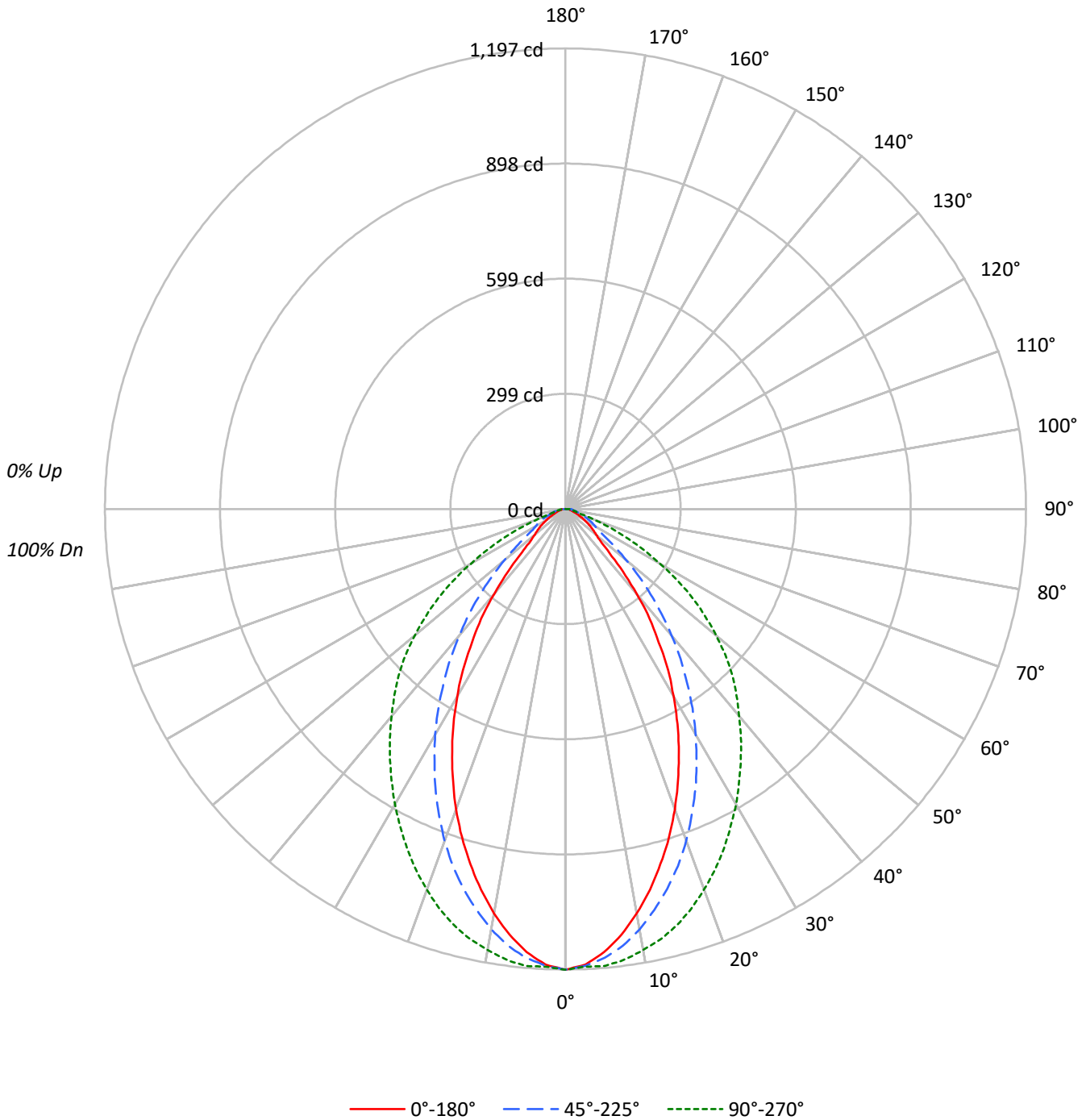
Lumens per Lamp: N/A
Luminaire Lumens: 1694.7 lumens
Efficiency: N/A
Efficacy: 40.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	10311	10311	10311
5°	9992	10119	10304
10°	9335	9698	10177
15°	8516	9112	9983
20°	7613	8411	9649
25°	6622	7601	9254
30°	5587	6732	8820
35°	4445	5794	8354
40°	3233	4828	7896
45°	1955	3813	7478
50°	1399	2760	6847
55°	1185	1868	6046
60°	968	1521	4884
65°	764	1363	3517
70°	640	1146	1853
75°	579	1068	935
80°	595	1061	927
85°	790	1591	1057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7478 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.2	6.5
10°-20°	288.9	17.0
20°-30°	374.6	22.1
30°-40°	360.7	21.3
40°-50°	268.3	15.8
50°-60°	165.0	9.7
60°-70°	81.0	4.8
70°-80°	31.6	1.9
80°-90°	14.4	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°	773.7	45.7
0°-40°	1134.4	66.9
0°-60°	1567.7	92.5
0°-90°	1694.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1694.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1197	1197	1197	1197	1197	
5°	1156	1173	1171	1181	1192	108
15°	955	986	1022	1084	1120	267
25°	697	734	800	900	974	319
35°	423	463	551	689	795	264
45°	160	199	313	483	614	133
55°	79	82	124	284	403	71
65°	38	40	67	107	173	38
75°	17	31	32	29	28	19
85°	8	15	16	16	11	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1197.4	1197.4	1197.4	1197.4	1197.4
2.5°	1185.3	1198.7	1188.0	1189.4	1190.7
5°	1155.9	1173.3	1170.6	1181.3	1192.0
7.5°	1115.8	1135.8	1145.2	1166.6	1181.3
10°	1067.6	1090.4	1109.1	1143.9	1163.9
12.5°	1014.1	1040.9	1067.6	1114.4	1145.2
15°	955.2	986.0	1022.1	1083.7	1119.8
17.5°	895.0	925.8	972.6	1043.5	1089.0
20°	830.8	864.3	917.8	996.7	1052.9
22.5°	763.9	800.0	858.9	948.5	1015.4
25°	697.0	734.5	800.0	900.4	974.0
27.5°	630.1	666.3	737.2	849.5	929.8
30°	561.9	599.4	677.0	794.7	887.0
32.5°	496.3	531.1	614.1	742.5	840.2
35°	422.8	462.9	551.2	689.0	794.7
37.5°	359.9	396.0	491.0	635.5	749.2
40°	287.6	327.8	429.5	583.3	702.4
42.5°	220.7	260.9	370.6	531.1	658.2
45°	160.5	199.3	313.1	483.0	614.1
47.5°	121.7	144.5	256.9	436.1	564.6
50°	104.4	111.0	206.0	385.3	511.1
52.5°	92.3	95.0	160.5	334.5	457.5
55°	78.9	81.6	124.4	283.6	402.7
57.5°	66.9	68.2	100.3	235.5	343.8
60°	56.2	57.5	88.3	188.6	283.6
62.5°	46.8	48.2	78.9	145.8	226.1
65°	37.5	40.1	66.9	107.0	172.6
67.5°	30.8	36.1	56.2	74.9	120.4
70°	25.4	34.8	45.5	52.2	73.6
72.5°	21.4	32.1	38.8	37.5	36.1
75°	17.4	30.8	32.1	29.4	28.1
77.5°	14.7	26.8	26.8	24.1	22.7
80°	12.0	21.4	21.4	21.4	18.7
82.5°	10.7	17.4	18.7	18.7	14.7
85°	8.0	14.7	16.1	16.1	10.7
87.5°	5.4	13.4	14.7	13.4	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)