

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1060772

Luminaire Tested: S124RDR-H1195D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060772
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D940-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

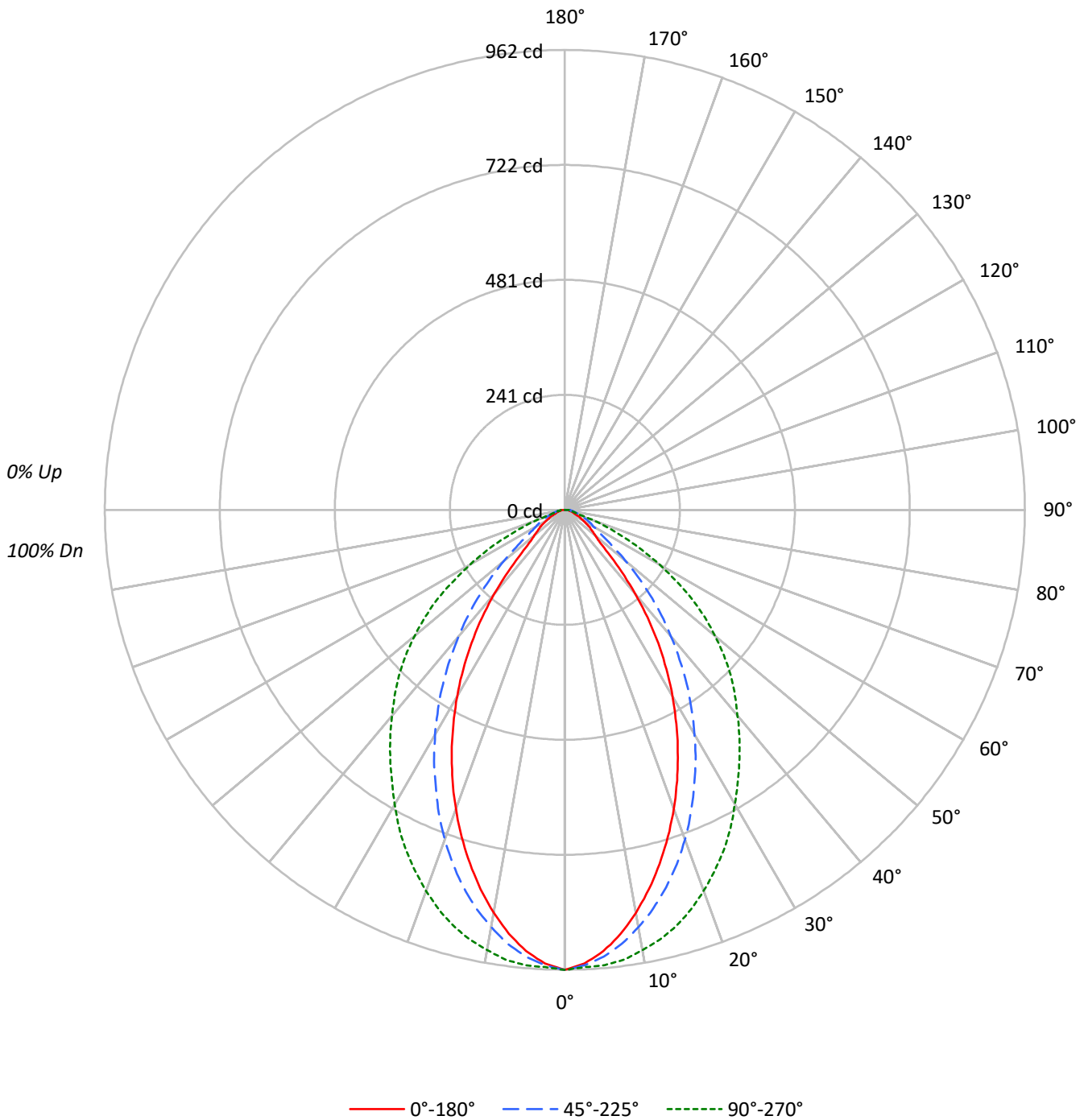
Lumens per Lamp: N/A
Luminaire Lumens: 1352.9 lumens
Efficiency: N/A
Efficacy: 37.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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: P1060772

CATALOG NUMBER: S124RDR-H1195D940-X4F0-XX-UDD-SVL-S

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	105	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	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43				43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8286	8286	8286
5°	8010	8106	8264
10°	7482	7750	8177
15°	6831	7290	8032
20°	6102	6731	7774
25°	5315	6071	7467
30°	4479	5392	7072
35°	3577	4672	6691
40°	2573	3880	6316
45°	1550	3055	5978
50°	1115	2214	5494
55°	937	1489	4870
60°	760	1181	3922
65°	599	1072	2818
70°	524	894	1511
75°	489	815	732
80°	486	848	669
85°	721	1205	850

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5978 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	6.5
10°-20°	231.4	17.1
20°-30°	300.3	22.2
30°-40°	288.6	21.3
40°-50°	214.2	15.8
50°-60°	131.2	9.7
60°-70°	63.7	4.7
70°-80°	24.3	1.8
80°-90°	10.9	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°	620.1	45.8
0°-40°	908.7	67.2
0°-60°	1254.0	92.7
0°-90°	1352.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1352.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	927	940	938	946	956	86
15°	766	788	818	867	901	214
25°	559	588	639	721	786	256
35°	340	371	444	550	636	211
45°	127	159	251	383	491	106
55°	62	65	99	224	324	56
65°	29	32	53	83	138	30
75°	15	23	24	22	22	16
85°	7	12	12	11	9	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	962.2	962.2	962.2	962.2	962.2
2.5°	949.9	960.9	953.6	956.0	957.3
5°	926.7	940.1	937.7	946.3	956.0
7.5°	894.8	910.8	915.6	932.8	948.7
10°	855.7	875.3	886.3	914.4	935.2
12.5°	812.8	833.6	854.4	892.4	920.5
15°	766.3	788.3	817.7	866.7	901.0
17.5°	717.3	741.8	777.3	836.1	876.5
20°	665.9	691.6	734.5	799.4	848.3
22.5°	613.3	640.2	688.0	760.2	817.7
25°	559.4	587.6	639.0	721.0	785.9
27.5°	504.3	533.7	592.5	679.4	750.4
30°	450.5	478.6	542.3	636.5	711.2
32.5°	395.4	424.8	493.3	592.5	673.3
35°	340.3	370.9	444.4	549.6	636.5
37.5°	284.0	317.0	394.2	508.0	599.8
40°	228.9	260.7	345.2	465.2	561.9
42.5°	175.1	209.3	298.7	422.3	526.4
45°	127.3	159.1	250.9	383.2	490.9
47.5°	95.5	115.1	206.9	346.4	451.7
50°	83.2	86.9	165.3	306.0	410.1
52.5°	72.2	74.7	128.5	262.0	368.5
55°	62.4	64.9	99.2	224.0	324.4
57.5°	52.6	55.1	79.6	187.3	274.2
60°	44.1	46.5	68.6	149.3	227.7
62.5°	36.7	37.9	61.2	113.8	182.4
65°	29.4	31.8	52.6	83.2	138.3
67.5°	24.5	26.9	42.8	57.5	96.7
70°	20.8	26.9	35.5	40.4	60.0
72.5°	17.1	24.5	29.4	28.2	28.2
75°	14.7	23.3	24.5	22.0	22.0
77.5°	12.2	20.8	19.6	18.4	17.1
80°	9.8	17.1	17.1	14.7	13.5
82.5°	8.6	13.5	13.5	13.5	11.0
85°	7.3	12.2	12.2	11.0	8.6
87.5°	4.9	9.8	11.0	9.8	6.1
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	7.16	8.50	7.53	8.81	9.13	16.26	17.60	16.62	17.91	18.23
	3H	8.20	9.39	8.58	9.72	10.09	16.76	17.95	17.14	18.28	18.64
	4H	8.72	9.83	9.12	10.18	10.56	16.77	17.88	17.18	18.23	18.61
	6H	9.17	10.19	9.58	10.56	10.95	16.77	17.79	17.19	18.16	18.55
	8H	9.36	10.32	9.79	10.71	11.12	16.77	17.73	17.20	18.12	18.53
	12H	9.57	10.49	10.00	10.88	11.31	16.77	17.69	17.20	18.07	18.50
4H	2H	8.25	9.36	8.66	9.71	10.09	16.15	17.25	16.55	17.61	17.99
	3H	9.52	10.43	9.94	10.83	11.24	16.73	17.63	17.14	18.04	18.44
	4H	10.23	11.04	10.66	11.46	11.90	16.77	17.58	17.21	18.00	18.44
	6H	10.86	11.56	11.32	12.00	12.47	16.83	17.53	17.29	17.97	18.44
	8H	11.11	11.76	11.57	12.21	12.68	16.84	17.50	17.31	17.94	18.41
	12H	11.38	11.96	11.87	12.44	12.92	16.88	17.45	17.36	17.94	18.41
8H	4H	10.66	11.31	11.13	11.76	12.23	16.72	17.38	17.19	17.82	18.29
	6H	11.53	12.07	12.03	12.56	13.04	16.82	17.35	17.32	17.85	18.33
	8H	11.94	12.42	12.46	12.94	13.43	16.88	17.36	17.40	17.87	18.36
	12H	12.42	12.84	12.93	13.34	13.91	16.98	17.40	17.49	17.90	18.47
12H	4H	10.70	11.28	11.19	11.76	12.24	16.69	17.27	17.18	17.76	18.23
	6H	11.64	12.13	12.17	12.64	13.13	16.79	17.28	17.32	17.79	18.28
	8H	12.16	12.59	12.68	13.08	13.65	16.90	17.33	17.42	17.82	18.39