

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060301

Luminaire Tested: S124RDRP-S1195D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060301
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: S124RDRP-S1195D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

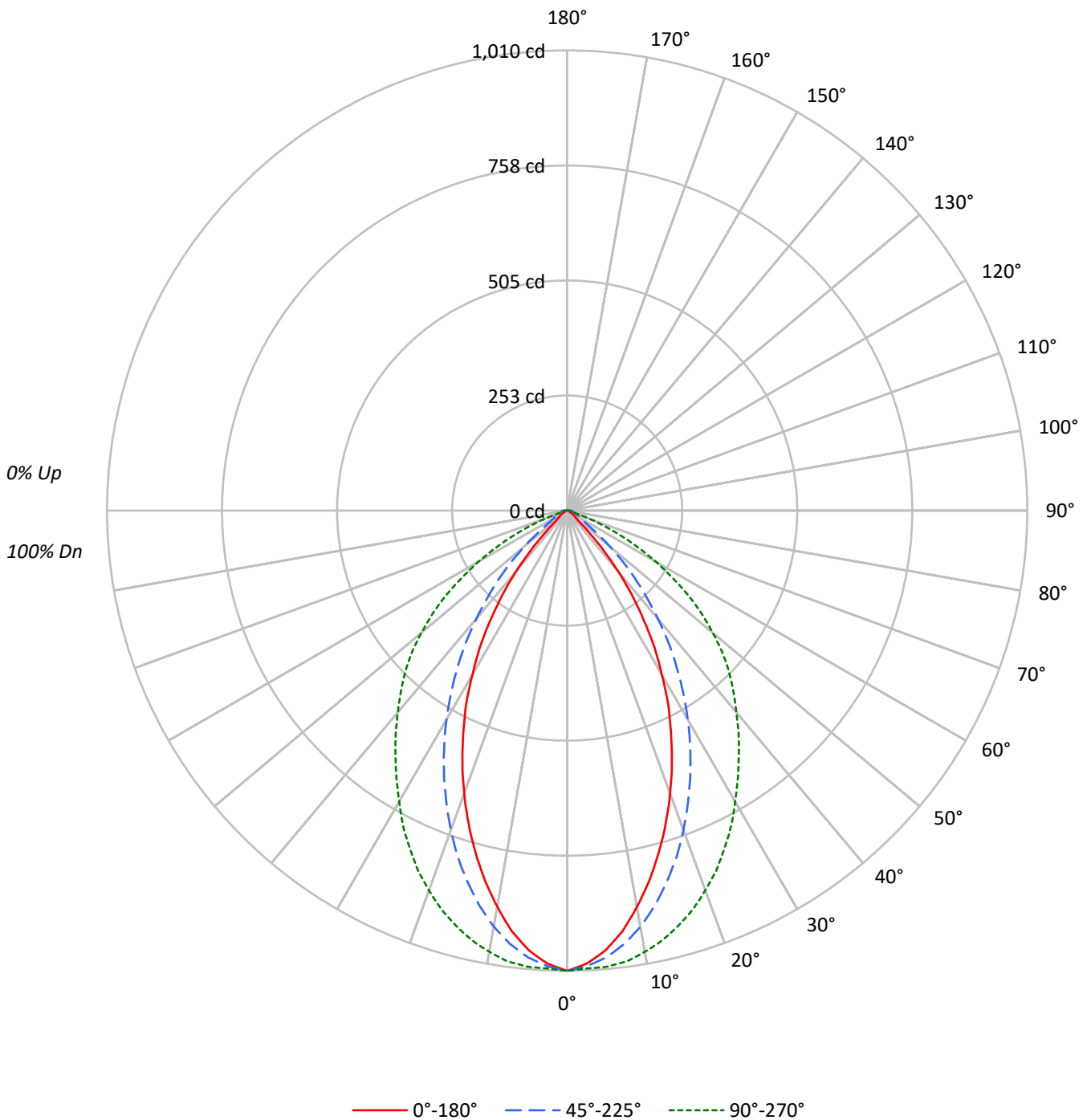
Lumens per Lamp: N/A
Luminaire Lumens: 1267.7 lumens
Efficiency: N/A
Efficacy: 30.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (A_{in}): 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	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	103	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°	8698	8698	8698
5°	8373	8512	8686
10°	7721	8107	8599
15°	6930	7526	8409
20°	6056	6841	8128
25°	5123	6076	7767
30°	4137	5268	7330
35°	3080	4403	6905
40°	1955	3489	6497
45°	782	2557	6126
50°	340	1630	5592
55°	261	844	4881
60°	184	575	3872
65°	137	573	2645
70°	136	506	1214
75°	180	536	489
80°	268	595	531
85°	534	1057	790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6126 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	7.3
10°-20°	238.5	18.8
20°-30°	301.2	23.8
30°-40°	276.7	21.8
40°-50°	188.6	14.9
50°-60°	102.3	8.1
60°-70°	43.4	3.4
70°-80°	15.0	1.2
80°-90°	9.5	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°	632.2	49.9
0°-40°	908.8	71.7
0°-60°	1199.8	94.6
0°-90°	1267.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1267.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	969	983	985	993	1005	90
15°	777	803	844	904	943	217
25°	539	574	640	738	818	247
35°	293	332	419	550	657	182
45°	64	103	210	372	503	59
55°	17	19	56	205	325	16
65°	7	8	28	64	130	7
75°	5	15	16	15	15	6
85°	5	11	11	11	8	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1010.1	1010.1	1010.1	1010.1	1010.1
2.5°	995.4	1007.4	1000.7	1003.4	1006.1
5°	968.6	983.4	984.7	992.7	1004.8
7.5°	931.2	948.6	959.3	979.3	998.1
10°	883.0	904.4	927.2	959.3	983.4
12.5°	832.2	854.9	888.4	933.8	966.0
15°	777.3	802.7	844.2	904.4	943.2
17.5°	719.8	747.9	797.4	868.3	917.8
20°	660.9	691.7	746.5	826.8	887.0
22.5°	600.7	632.8	693.0	784.0	854.9
25°	539.2	574.0	639.5	738.5	817.5
27.5°	480.3	512.4	584.7	693.0	780.0
30°	416.1	452.2	529.8	646.2	737.2
32.5°	357.2	392.0	473.6	598.0	697.0
35°	293.0	331.8	418.8	549.9	656.9
37.5°	232.8	270.3	365.2	504.4	618.1
40°	173.9	212.7	310.4	458.9	578.0
42.5°	116.4	157.9	258.2	412.1	540.5
45°	64.2	103.0	210.0	371.9	503.0
47.5°	33.4	56.2	164.6	331.8	462.9
50°	25.4	30.8	121.7	287.6	417.4
52.5°	21.4	22.7	82.9	243.5	371.9
55°	17.4	18.7	56.2	204.7	325.1
57.5°	13.4	14.7	40.1	167.2	272.9
60°	10.7	12.0	33.4	128.4	224.8
62.5°	8.0	9.4	32.1	95.0	176.6
65°	6.7	8.0	28.1	64.2	129.8
67.5°	5.4	8.0	24.1	41.5	87.0
70°	5.4	10.7	20.1	26.8	48.2
72.5°	5.4	12.0	17.4	17.4	17.4
75°	5.4	14.7	16.1	14.7	14.7
77.5°	5.4	13.4	13.4	13.4	13.4
80°	5.4	12.0	12.0	12.0	10.7
82.5°	5.4	10.7	12.0	12.0	9.4
85°	5.4	10.7	10.7	10.7	8.0
87.5°	4.0	10.7	10.7	10.7	5.4
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	0.00	0.00	0.00	0.00	0.12	15.96	17.23	16.32	17.54	17.86
	3H	0.00	0.60	0.00	0.93	1.30	16.31	17.44	16.69	17.77	18.14
	4H	0.86	1.91	1.27	2.26	2.65	16.28	17.33	16.68	17.68	18.06
	6H	2.24	3.20	2.65	3.57	3.97	16.25	17.22	16.67	17.59	17.98
	8H	2.92	3.84	3.36	4.23	4.63	16.24	17.15	16.67	17.55	17.95
	12H	3.73	4.60	4.17	4.99	5.42	16.24	17.11	16.67	17.49	17.93
4H	2H	1.65	2.70	2.06	3.05	3.44	15.76	16.81	16.16	17.16	17.54
	3H	3.08	3.93	3.49	4.34	4.74	16.15	17.01	16.57	17.41	17.82
	4H	4.53	5.29	4.96	5.71	6.16	16.13	16.90	16.57	17.32	17.76
	6H	5.78	6.44	6.24	6.88	7.35	16.15	16.81	16.62	17.26	17.73
	8H	6.35	6.96	6.82	7.41	7.88	16.16	16.78	16.63	17.23	17.70
	12H	7.03	7.57	7.52	8.06	8.53	16.20	16.74	16.69	17.23	17.70
8H	4H	5.60	6.22	6.08	6.67	7.14	16.04	16.65	16.51	17.10	17.57
	6H	7.21	7.72	7.72	8.21	8.70	16.09	16.59	16.59	17.08	17.57
	8H	8.05	8.50	8.57	9.02	9.51	16.14	16.59	16.67	17.11	17.60
	12H	9.02	9.42	9.54	9.91	10.49	16.26	16.66	16.77	17.15	17.73
12H	4H	5.79	6.34	6.28	6.82	7.29	16.00	16.54	16.48	17.02	17.50
	6H	7.56	8.01	8.08	8.53	9.02	16.05	16.50	16.58	17.02	17.51
	8H	8.58	8.98	9.10	9.48	10.05	16.16	16.56	16.67	17.05	17.62