

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: P1060323

Luminaire Tested: S124RDRP-S1195D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060323
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: S124RDRP-S1195D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

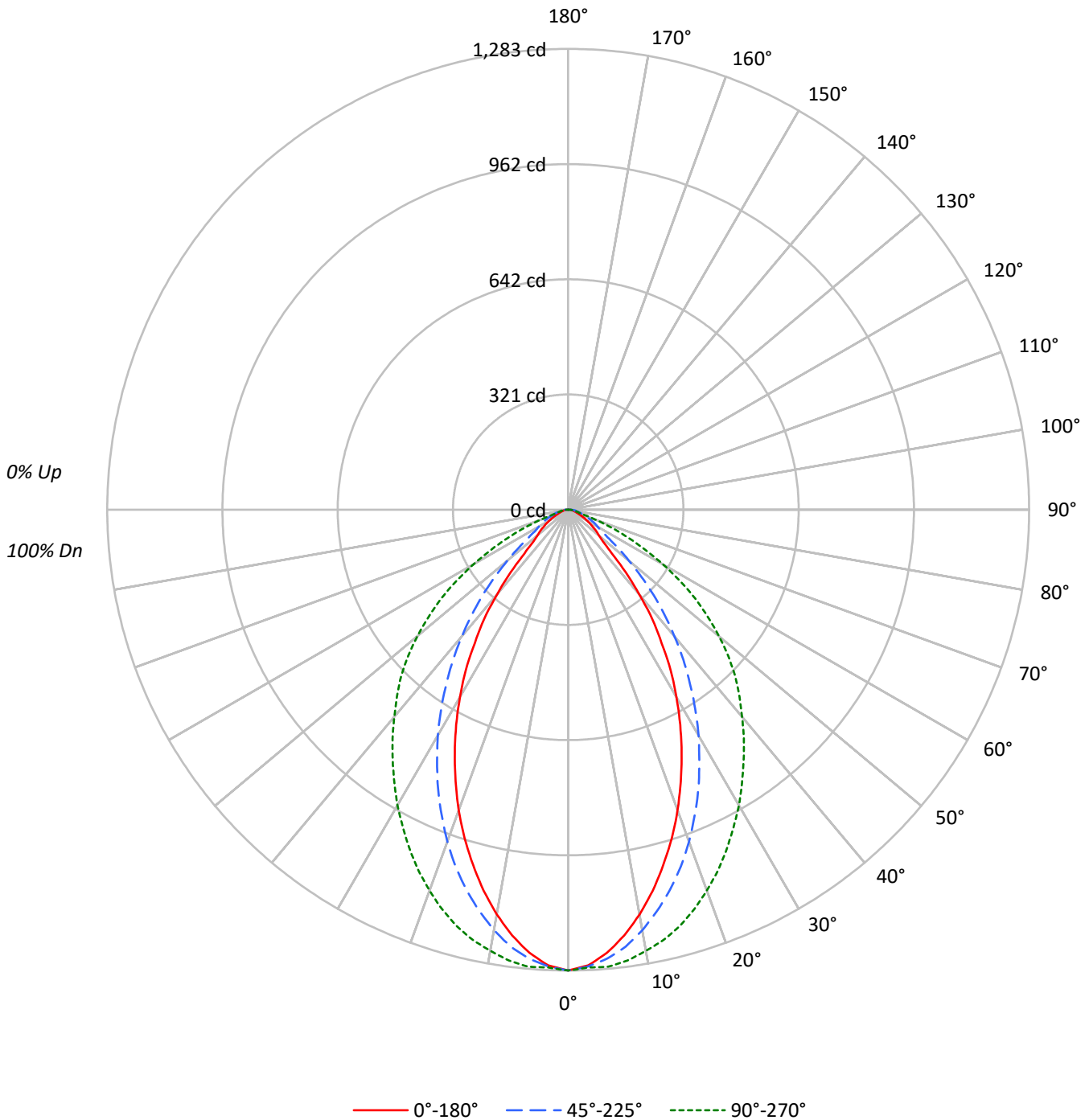
Lumens per Lamp: N/A
Luminaire Lumens: 1815.8 lumens
Efficiency: N/A
Efficacy: 43.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060323

CATALOG NUMBER: S124RDRP-S1195D840-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1060323

CATALOG NUMBER: S124RDRP-S1195D840-X4F0-XX-UDD-SVL-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11047	11047	11047
5°	10706	10841	11040
10°	10002	10390	10905
15°	9124	9763	10696
20°	8158	9011	10338
25°	7096	8145	9915
30°	5986	7212	9450
35°	4762	6209	8951
40°	3464	5172	8459
45°	2095	4084	8012
50°	1498	2957	7336
55°	1270	2001	6478
60°	1037	1629	5234
65°	817	1461	3767
70°	685	1226	1984
75°	619	1145	1001
80°	640	1136	997
85°	850	1699	1136

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8012 cd/sqm



TEST NUMBER: P1060323

CATALOG NUMBER: S124RDRP-S1195D840-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.1	6.5
10°-20°	309.5	17.0
20°-30°	401.4	22.1
30°-40°	386.4	21.3
40°-50°	287.4	15.8
50°-60°	176.8	9.7
60°-70°	86.8	4.8
70°-80°	33.9	1.9
80°-90°	15.4	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°	829.0	45.7
0°-40°	1215.4	66.9
0°-60°	1679.7	92.5
0°-90°	1815.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1815.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1238	1257	1254	1266	1277	115
15°	1024	1056	1095	1161	1200	286
25°	747	787	857	965	1044	342
35°	453	496	591	738	852	283
45°	172	214	335	518	658	143
55°	85	87	133	304	432	76
65°	40	43	72	115	185	41
75°	19	33	34	32	30	20
85°	9	16	17	17	12	9
90°	0	0	0	0	0	

TEST NUMBER: P1060323

CATALOG NUMBER: S124RDRP-S1195D840-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1282.9	1282.9	1282.9	1282.9	1282.9
2.5°	1270.0	1284.3	1272.9	1274.3	1275.7
5°	1238.5	1257.1	1254.2	1265.7	1277.2
7.5°	1195.5	1217.0	1227.0	1249.9	1265.7
10°	1143.9	1168.2	1188.3	1225.6	1247.1
12.5°	1086.5	1115.2	1143.9	1194.0	1227.0
15°	1023.5	1056.4	1095.1	1161.1	1199.8
17.5°	959.0	991.9	1042.1	1118.1	1166.8
20°	890.2	926.0	983.3	1067.9	1128.1
22.5°	818.5	857.2	920.3	1016.3	1088.0
25°	746.8	786.9	857.2	964.7	1043.5
27.5°	675.1	713.8	789.8	910.2	996.2
30°	602.0	642.2	725.3	851.5	950.4
32.5°	531.8	569.1	657.9	795.5	900.2
35°	453.0	496.0	590.6	738.2	851.5
37.5°	385.6	424.3	526.1	680.9	802.7
40°	308.2	351.2	460.1	625.0	752.5
42.5°	236.5	279.5	397.1	569.1	705.2
45°	172.0	213.6	335.4	517.5	657.9
47.5°	130.4	154.8	275.2	467.3	604.9
50°	111.8	119.0	220.7	412.8	547.6
52.5°	98.9	101.8	172.0	358.4	490.2
55°	84.6	87.4	133.3	303.9	431.5
57.5°	71.7	73.1	107.5	252.3	368.4
60°	60.2	61.6	94.6	202.1	303.9
62.5°	50.2	51.6	84.6	156.2	242.2
65°	40.1	43.0	71.7	114.7	184.9
67.5°	33.0	38.7	60.2	80.3	129.0
70°	27.2	37.3	48.7	55.9	78.8
72.5°	22.9	34.4	41.6	40.1	38.7
75°	18.6	33.0	34.4	31.5	30.1
77.5°	15.8	28.7	28.7	25.8	24.4
80°	12.9	22.9	22.9	22.9	20.1
82.5°	11.5	18.6	20.1	20.1	15.8
85°	8.6	15.8	17.2	17.2	11.5
87.5°	5.7	14.3	15.8	14.3	8.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060323
 CATALOG NUMBER: S124RDRP-S1195D840-X4F0-XX-UDD-SVL-W

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	8.13	9.47	8.50	9.79	10.10	17.30	18.64	17.66	18.95	19.27
	3H	9.24	10.43	9.62	10.76	11.13	17.81	19.00	18.19	19.33	19.69
	4H	9.76	10.87	10.16	11.22	11.60	17.83	18.94	18.23	19.29	19.67
	6H	10.19	11.21	10.61	11.58	11.98	17.84	18.86	18.25	19.23	19.62
	8H	10.38	11.35	10.81	11.74	12.15	17.84	18.81	18.27	19.20	19.60
	12H	10.57	11.49	11.00	11.87	12.30	17.84	18.77	18.28	19.15	19.58
4H	2H	9.28	10.39	9.68	10.74	11.12	17.19	18.30	17.59	18.65	19.03
	3H	10.62	11.53	11.03	11.93	12.33	17.78	18.69	18.19	19.09	19.50
	4H	11.35	12.17	11.79	12.58	13.03	17.84	18.65	18.27	19.07	19.51
	6H	11.96	12.66	12.42	13.11	13.58	17.91	18.62	18.38	19.06	19.53
	8H	12.20	12.86	12.67	13.31	13.78	17.94	18.60	18.41	19.05	19.52
	12H	12.44	13.02	12.93	13.50	13.98	17.99	18.57	18.47	19.05	19.52
8H	4H	11.82	12.48	12.29	12.92	13.39	17.80	18.45	18.27	18.90	19.37
	6H	12.67	13.21	13.17	13.70	14.18	17.92	18.46	18.43	18.96	19.44
	8H	13.07	13.56	13.59	14.07	14.56	18.01	18.49	18.53	19.01	19.50
	12H	13.50	13.93	14.01	14.42	14.99	18.13	18.56	18.64	19.05	19.62
12H	4H	11.87	12.45	12.36	12.94	13.41	17.77	18.35	18.26	18.83	19.31
	6H	12.80	13.28	13.32	13.80	14.29	17.91	18.39	18.43	18.90	19.40
	8H	13.32	13.75	13.84	14.24	14.82	18.04	18.47	18.55	18.96	19.53