

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: P1060857

Luminaire Tested: S124RDRP-H350D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060857
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-H350D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

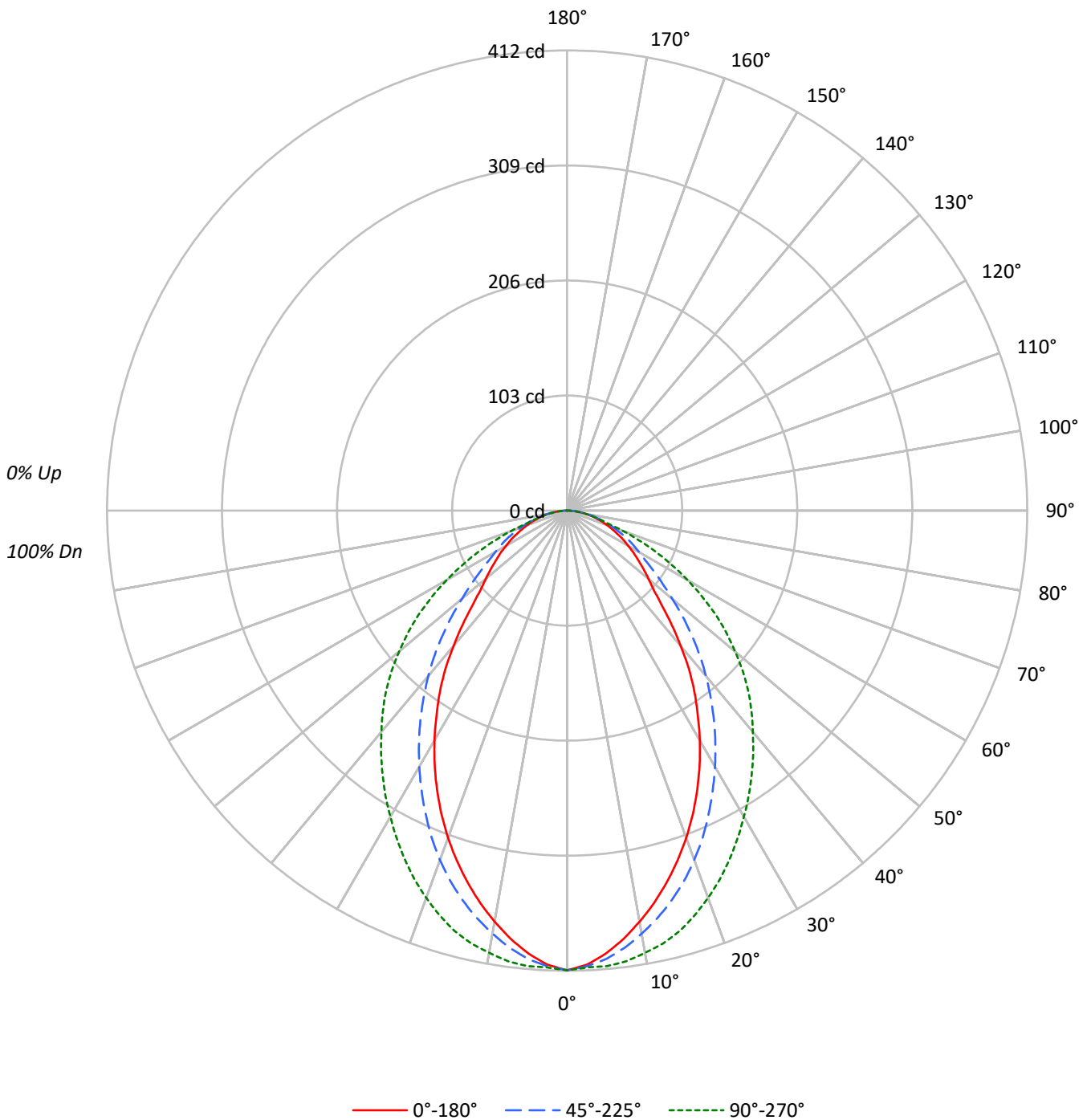
Lumens per Lamp: N/A
Luminaire Lumens: 755.3 lumens
Efficiency: N/A
Efficacy: 64.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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

TEST NUMBER: P1060857

CATALOG NUMBER: S124RDRP-H350D940-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1060857

CATALOG NUMBER: S124RDRP-H350D940-X4F0-XX-UDD-WVL-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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3544	3544	3544
5°	3441	3483	3539
10°	3268	3363	3516
15°	3072	3221	3474
20°	2857	3051	3381
25°	2620	2848	3270
30°	2362	2633	3147
35°	2091	2408	3029
40°	1777	2174	2907
45°	1455	1920	2795
50°	1274	1649	2630
55°	1170	1422	2434
60°	1085	1280	2146
65°	1017	1202	1795
70°	954	1100	1347
75°	898	1005	981
80°	833	922	833
85°	751	899	721

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2795 cd/sqm



TEST NUMBER: P1060857

CATALOG NUMBER: S124RDRP-H350D940-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	5.0
10°-20°	102.3	13.6
20°-30°	139.9	18.5
30°-40°	147.0	19.5
40°-50°	127.6	16.9
50°-60°	96.2	12.7
60°-70°	62.4	8.3
70°-80°	32.0	4.2
80°-90°	9.7	1.3
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°	280.3	37.1
0°-40°	427.3	56.6
0°-60°	651.2	86.2
0°-90°	755.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	755.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	412	412	412	412	412	
5°	398	404	403	406	409	37
15°	345	353	361	378	390	97
25°	276	286	300	323	344	126
35°	199	210	229	260	288	124
45°	120	131	158	197	230	94
55°	78	80	95	134	162	70
65°	50	51	59	71	88	50
75°	27	30	30	31	30	29
85°	8	10	9	9	7	9
90°	0	0	0	0	0	



TEST NUMBER: P1060857

CATALOG NUMBER: S124RDRP-H350D940-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	411.6	411.6	411.6	411.6	411.6
2.5°	406.9	412.0	408.3	409.1	409.4
5°	398.1	403.6	402.9	406.1	409.4
7.5°	386.8	393.4	394.8	401.4	406.9
10°	373.7	381.0	384.6	395.2	402.1
12.5°	359.9	367.2	373.7	387.2	397.0
15°	344.6	353.0	361.3	377.7	389.7
17.5°	328.6	337.3	347.9	365.7	379.9
20°	311.8	320.5	332.9	352.2	369.0
22.5°	294.0	303.8	316.9	337.7	357.3
25°	275.7	285.6	299.8	322.7	344.2
27.5°	256.8	267.0	282.3	307.8	330.7
30°	237.5	248.4	264.8	291.8	316.5
32.5°	217.8	229.5	247.0	275.7	302.7
35°	198.9	209.8	229.1	259.7	288.1
37.5°	179.2	190.1	210.9	244.0	273.6
40°	158.1	170.1	193.4	227.7	258.6
42.5°	138.4	150.4	175.6	212.0	244.4
45°	119.5	130.8	157.7	197.1	229.5
47.5°	104.9	112.9	139.9	182.5	213.5
50°	95.1	98.7	123.1	166.5	196.3
52.5°	86.3	89.2	107.8	150.4	179.6
55°	77.9	80.1	94.7	134.4	162.1
57.5°	70.7	71.8	83.0	118.4	143.2
60°	63.0	64.5	74.3	102.0	124.6
62.5°	56.8	57.6	66.7	86.3	106.0
65°	49.9	51.0	59.0	71.4	88.1
67.5°	43.7	45.5	51.0	58.3	69.6
70°	37.9	40.4	43.7	47.4	53.5
72.5°	32.4	35.3	37.2	38.6	37.5
75°	27.0	30.2	30.2	30.6	29.5
77.5°	21.9	24.8	24.4	24.0	22.6
80°	16.8	19.3	18.6	18.2	16.8
82.5°	12.4	14.2	13.5	13.1	11.3
85°	7.6	9.5	9.1	8.7	7.3
87.5°	3.6	5.5	5.1	4.7	3.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1060857
 CATALOG NUMBER: S124RDRP-H350D940-X4F0-XX-UDD-WVL-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	10.90	12.39	11.27	12.70	13.02	14.64	16.13	15.00	16.44	16.75
	3H	12.57	13.90	12.95	14.23	14.59	15.76	17.10	16.14	17.43	17.79
	4H	13.23	14.48	13.63	14.83	15.21	16.06	17.31	16.46	17.66	18.04
	6H	13.74	14.90	14.16	15.26	15.66	16.26	17.41	16.67	17.78	18.17
	8H	13.92	15.02	14.35	15.41	15.81	16.32	17.41	16.74	17.80	18.20
	12H	14.04	15.09	14.47	15.47	15.90	16.35	17.40	16.78	17.78	18.21
4H	2H	11.69	12.94	12.09	13.29	13.67	14.80	16.05	15.20	16.40	16.78
	3H	13.56	14.60	13.97	15.00	15.40	16.13	17.17	16.55	17.57	17.97
	4H	14.37	15.30	14.80	15.72	16.15	16.55	17.48	16.98	17.90	18.34
	6H	15.01	15.82	15.47	16.27	16.73	16.87	17.68	17.33	18.13	18.59
	8H	15.24	15.99	15.70	16.44	16.91	16.97	17.72	17.43	18.17	18.64
	12H	15.40	16.08	15.88	16.55	17.03	17.04	17.71	17.52	18.19	18.66
8H	4H	14.72	15.47	15.18	15.92	16.38	16.68	17.44	17.15	17.89	18.35
	6H	15.51	16.13	16.00	16.62	17.10	17.10	17.73	17.60	18.22	18.70
	8H	15.83	16.39	16.34	16.90	17.39	17.26	17.82	17.78	18.33	18.82
	12H	16.09	16.58	16.60	17.08	17.64	17.40	17.90	17.91	18.39	18.95
12H	4H	14.75	15.42	15.23	15.90	16.37	16.69	17.36	17.17	17.84	18.31
	6H	15.57	16.13	16.08	16.64	17.13	17.12	17.69	17.64	18.20	18.69
	8H	15.95	16.45	16.46	16.94	17.51	17.33	17.83	17.84	18.32	18.89