

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: P1061884

Luminaire Tested: S125RDR-H1090D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061884
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

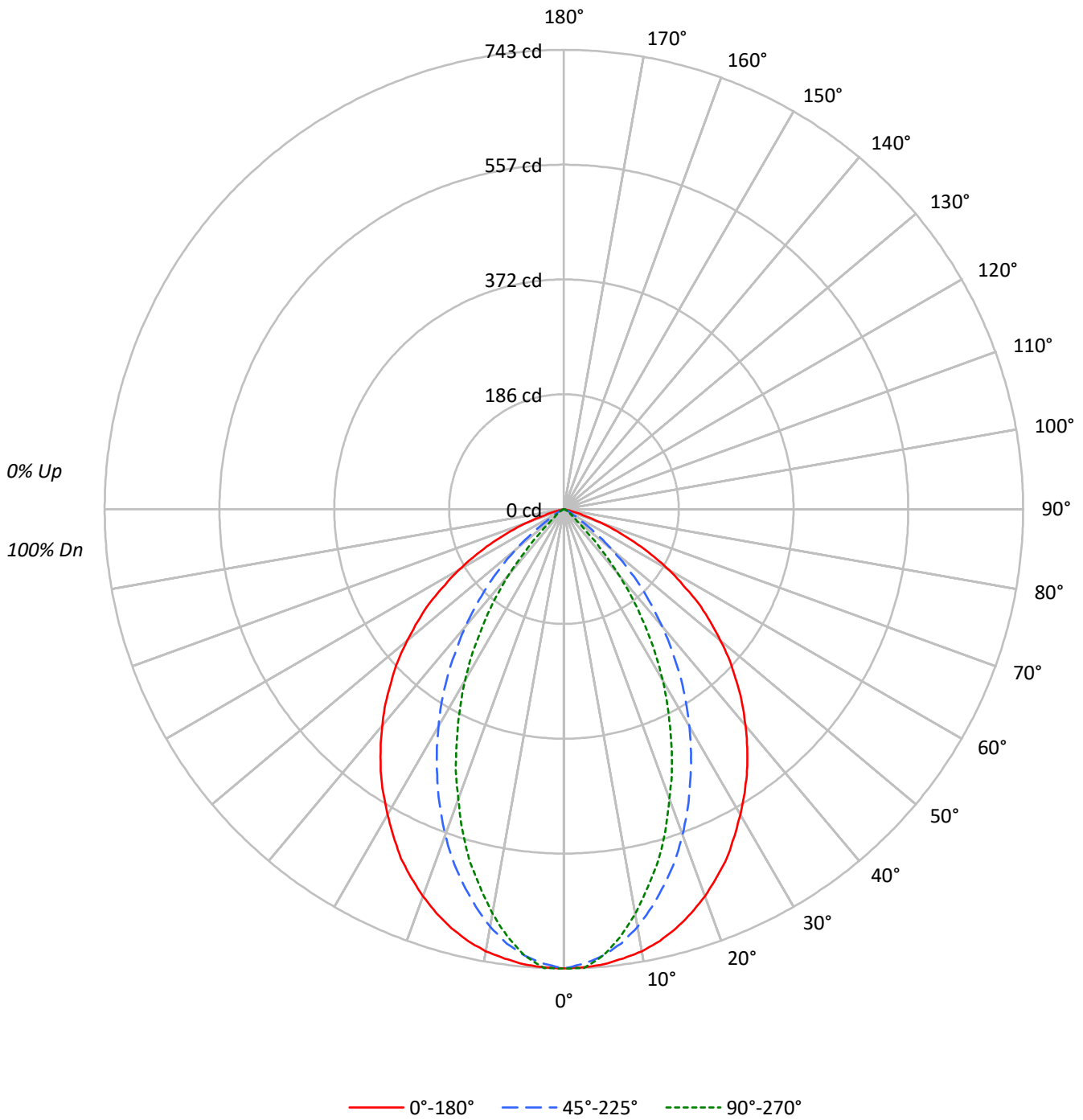
Lumens per Lamp: N/A
Luminaire Lumens: 960.0 lumens
Efficiency: N/A
Efficacy: 30.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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: P1061884

CATALOG NUMBER: S125RDR-H1090D930-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot



TEST NUMBER: P1061884

CATALOG NUMBER: S125RDR-H1090D930-X4F0-XX-UDD-BVL-B

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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	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°	5116	5116	5116
5°	5109	5014	5014
10°	5079	4798	4647
15°	5003	4479	4200
20°	4884	4109	3656
25°	4737	3679	3113
30°	4536	3227	2541
35°	4342	2752	1904
40°	4106	2220	1233
45°	3847	1680	535
50°	3539	1071	199
55°	3189	471	142
60°	2700	202	95
65°	2045	127	47
70°	1244	58	20
75°	261	27	27
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3847 cd/sqm



TEST NUMBER: P1061884

CATALOG NUMBER: S125RDR-H1090D930-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	7.1
10°-20°	178.6	18.6
20°-30°	229.3	23.9
30°-40°	215.8	22.5
40°-50°	150.9	15.7
50°-60°	80.6	8.4
60°-70°	32.1	3.3
70°-80°	4.2	0.4
80°-90°	0.0	0.0
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°	476.3	49.6
0°-40°	692.2	72.1
0°-60°	923.7	96.2
0°-90°	960.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	960.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	743	743	743	743	743	
5°	739	737	726	727	726	70
15°	702	679	628	599	589	198
25°	624	569	484	431	410	286
35°	517	434	327	253	226	322
45°	395	296	172	83	55	305
55°	266	163	39	14	12	236
65°	126	50	8	4	3	125
75°	10	3	1	1	1	19
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P1061884

CATALOG NUMBER: S125RDR-H1090D930-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	743.1	743.1	743.1	743.1	743.1
2.5°	742.1	743.1	736.2	742.1	743.1
5°	739.2	737.2	725.5	727.4	725.5
7.5°	733.3	728.4	708.8	701.9	698.0
10°	726.4	715.7	686.2	671.5	664.7
12.5°	715.7	700.0	658.8	636.2	626.4
15°	701.9	679.4	628.4	599.0	589.2
17.5°	685.3	655.9	597.0	560.8	546.1
20°	666.6	627.4	560.8	517.6	499.0
22.5°	645.1	600.0	523.5	475.5	456.8
25°	623.5	568.6	484.3	431.4	409.8
27.5°	597.0	536.2	445.1	388.2	364.7
30°	570.6	503.9	405.9	344.1	319.6
32.5°	544.1	469.6	366.6	298.0	273.5
35°	516.6	434.3	327.4	252.9	226.5
37.5°	487.2	399.0	285.3	209.8	182.3
40°	456.8	364.7	247.0	167.6	137.2
42.5°	427.4	330.4	208.8	126.5	93.1
45°	395.1	296.1	172.5	83.3	54.9
47.5°	364.7	262.7	135.3	48.0	28.4
50°	330.4	228.4	100.0	25.5	18.6
52.5°	298.0	195.1	66.7	16.7	14.7
55°	265.7	162.7	39.2	13.7	11.8
57.5°	228.4	131.4	21.6	10.8	8.8
60°	196.1	102.9	14.7	7.8	6.9
62.5°	158.8	75.5	10.8	5.9	4.9
65°	125.5	50.0	7.8	3.9	2.9
67.5°	93.1	29.4	4.9	2.0	2.0
70°	61.8	15.7	2.9	1.0	1.0
72.5°	32.4	6.9	2.0	1.0	1.0
75°	9.8	2.9	1.0	1.0	1.0
77.5°	0.0	1.0	0.0	0.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061884
 CATALOG NUMBER: S125RDR-H1090D930-X4F0-XX-UDD-BVL-B

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	14.62	15.88	14.98	16.19	16.51	0.00	0.00	0.00	0.00	0.00
	3H	15.20	16.31	15.58	16.64	17.01	0.00	0.00	0.00	0.00	0.00
	4H	15.16	16.20	15.57	16.55	16.93	0.00	0.00	0.00	0.00	0.00
	6H	15.08	16.02	15.49	16.40	16.79	0.00	0.00	0.00	0.00	0.00
	8H	15.03	15.93	15.46	16.32	16.72	0.00	0.00	0.00	0.00	0.00
	12H	14.99	15.84	15.42	16.22	16.65	0.00	0.00	0.00	0.00	0.00
4H	2H	14.39	15.42	14.79	15.77	16.16	0.00	0.00	0.00	0.00	0.00
	3H	14.98	15.82	15.39	16.22	16.63	0.00	0.00	0.00	0.00	0.00
	4H	14.93	15.67	15.37	16.09	16.54	0.00	0.00	0.00	0.00	0.00
	6H	14.84	15.48	15.31	15.93	16.40	0.00	0.00	0.00	0.00	0.00
	8H	14.78	15.38	15.25	15.83	16.30	0.00	0.00	0.00	0.00	0.00
	12H	14.73	15.25	15.22	15.74	16.21	0.00	0.00	0.00	0.00	0.00
8H	4H	14.78	15.38	15.26	15.83	16.30	0.00	0.00	0.00	0.00	0.00
	6H	14.68	15.16	15.18	15.66	16.14	0.00	0.00	0.00	0.00	0.00
	8H	14.61	15.04	15.14	15.56	16.05	0.00	0.00	0.00	0.00	0.00
	12H	14.56	14.94	15.08	15.44	16.01	0.00	0.00	0.00	0.00	0.00
12H	4H	14.73	15.25	15.22	15.74	16.21	0.00	0.00	0.00	0.00	0.00
	6H	14.61	15.04	15.14	15.56	16.05	0.00	0.00	0.00	0.00	0.00
	8H	14.56	14.94	15.08	15.44	16.01	0.00	0.00	0.00	0.00	0.00