

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: P1061875

Luminaire Tested: S125RDR-H1090D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061875
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-H1090D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

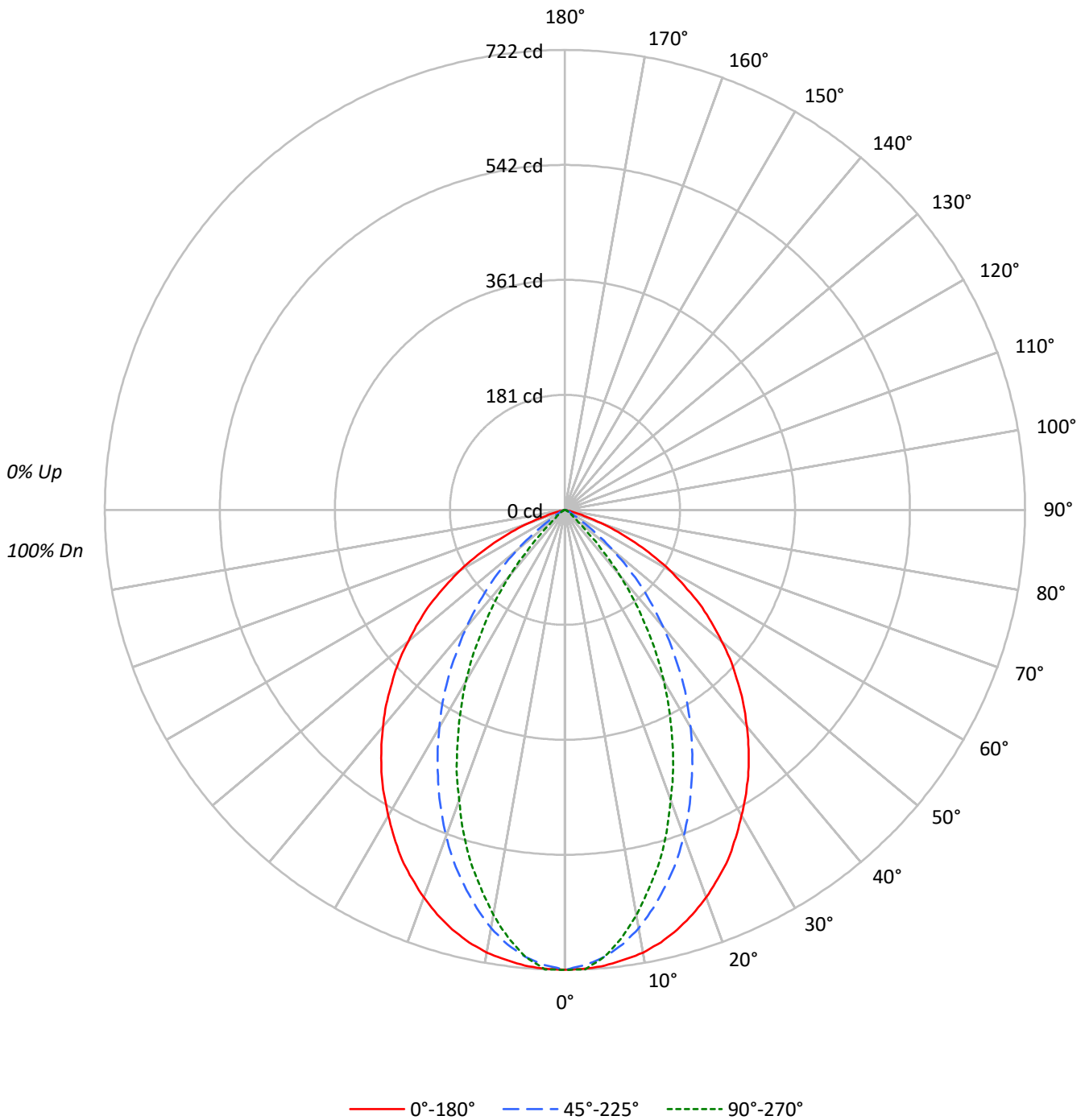
Lumens per Lamp: N/A
Luminaire Lumens: 932.8 lumens
Efficiency: N/A
Efficacy: 29.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1061875

CATALOG NUMBER: S125RDR-H1090D927-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061875

CATALOG NUMBER: S125RDR-H1090D927-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	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°	4971	4971	4971
5°	4964	4872	4872
10°	4935	4662	4515
15°	4861	4352	4081
20°	4746	3993	3552
25°	4602	3575	3025
30°	4408	3136	2469
35°	4219	2675	1849
40°	3990	2157	1199
45°	3738	1632	519
50°	3438	1041	194
55°	3098	457	137
60°	2623	197	92
65°	1986	124	47
70°	1208	58	20
75°	253	27	27
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3738 cd/sqm



TEST NUMBER: P1061875

CATALOG NUMBER: S125RDR-H1090D927-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	7.1
10°-20°	173.5	18.6
20°-30°	222.8	23.9
30°-40°	209.7	22.5
40°-50°	146.6	15.7
50°-60°	78.3	8.4
60°-70°	31.2	3.3
70°-80°	4.1	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°	462.8	49.6
0°-40°	672.6	72.1
0°-60°	897.5	96.2
0°-90°	932.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	932.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	718	716	705	707	705	68
15°	682	660	611	582	572	192
25°	606	552	471	419	398	278
35°	502	422	318	246	220	313
45°	384	288	168	81	53	296
55°	258	158	38	13	11	229
65°	122	49	8	4	3	121
75°	10	3	1	1	1	19
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P1061875

CATALOG NUMBER: S125RDR-H1090D927-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	722.0	722.0	722.0	722.0	722.0
2.5°	721.1	722.0	715.4	721.1	722.0
5°	718.2	716.3	704.9	706.8	704.9
7.5°	712.5	707.7	688.7	682.0	678.2
10°	705.8	695.4	666.8	652.5	645.8
12.5°	695.4	680.1	640.1	618.2	608.7
15°	682.0	660.1	610.6	582.0	572.5
17.5°	665.8	637.3	580.1	544.9	530.6
20°	647.7	609.6	544.9	502.9	484.8
22.5°	626.8	583.0	508.7	462.0	443.9
25°	605.8	552.5	470.6	419.1	398.2
27.5°	580.1	521.0	432.5	377.2	354.3
30°	554.4	489.6	394.4	334.3	310.5
32.5°	528.7	456.3	356.3	289.6	265.8
35°	502.0	422.0	318.2	245.8	220.0
37.5°	473.4	387.7	277.2	203.8	177.2
40°	443.9	354.3	240.0	162.9	133.4
42.5°	415.3	321.0	202.9	122.9	90.5
45°	383.9	287.7	167.6	81.0	53.3
47.5°	354.3	255.3	131.5	46.7	27.6
50°	321.0	221.9	97.2	24.8	18.1
52.5°	289.6	189.6	64.8	16.2	14.3
55°	258.1	158.1	38.1	13.3	11.4
57.5°	221.9	127.6	21.0	10.5	8.6
60°	190.5	100.0	14.3	7.6	6.7
62.5°	154.3	73.3	10.5	5.7	4.8
65°	121.9	48.6	7.6	3.8	2.9
67.5°	90.5	28.6	4.8	1.9	1.9
70°	60.0	15.2	2.9	1.0	1.0
72.5°	31.4	6.7	1.9	1.0	1.0
75°	9.5	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: P1061875
 CATALOG NUMBER: S125RDR-H1090D927-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	14.51	15.78	14.88	16.09	16.40	0.00	0.00	0.00	0.00	0.00
	3H	15.10	16.21	15.48	16.54	16.91	0.00	0.00	0.00	0.00	0.00
	4H	15.06	16.09	15.47	16.45	16.83	0.00	0.00	0.00	0.00	0.00
	6H	14.98	15.92	15.39	16.29	16.69	0.00	0.00	0.00	0.00	0.00
	8H	14.93	15.82	15.36	16.21	16.62	0.00	0.00	0.00	0.00	0.00
	12H	14.88	15.74	15.32	16.12	16.55	0.00	0.00	0.00	0.00	0.00
4H	2H	14.29	15.32	14.69	15.67	16.05	0.00	0.00	0.00	0.00	0.00
	3H	14.88	15.71	15.29	16.12	16.52	0.00	0.00	0.00	0.00	0.00
	4H	14.83	15.57	15.26	15.99	16.44	0.00	0.00	0.00	0.00	0.00
	6H	14.74	15.38	15.21	15.83	16.29	0.00	0.00	0.00	0.00	0.00
	8H	14.68	15.27	15.15	15.72	16.20	0.00	0.00	0.00	0.00	0.00
	12H	14.63	15.15	15.12	15.64	16.11	0.00	0.00	0.00	0.00	0.00
8H	4H	14.68	15.28	15.15	15.72	16.20	0.00	0.00	0.00	0.00	0.00
	6H	14.57	15.06	15.08	15.55	16.04	0.00	0.00	0.00	0.00	0.00
	8H	14.51	14.94	15.03	15.46	15.95	0.00	0.00	0.00	0.00	0.00
	12H	14.46	14.84	14.98	15.34	15.91	0.00	0.00	0.00	0.00	0.00
12H	4H	14.63	15.15	15.12	15.64	16.11	0.00	0.00	0.00	0.00	0.00
	6H	14.51	14.94	15.03	15.46	15.95	0.00	0.00	0.00	0.00	0.00
	8H	14.46	14.84	14.98	15.34	15.91	0.00	0.00	0.00	0.00	0.00