

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: P1061453

Luminaire Tested: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

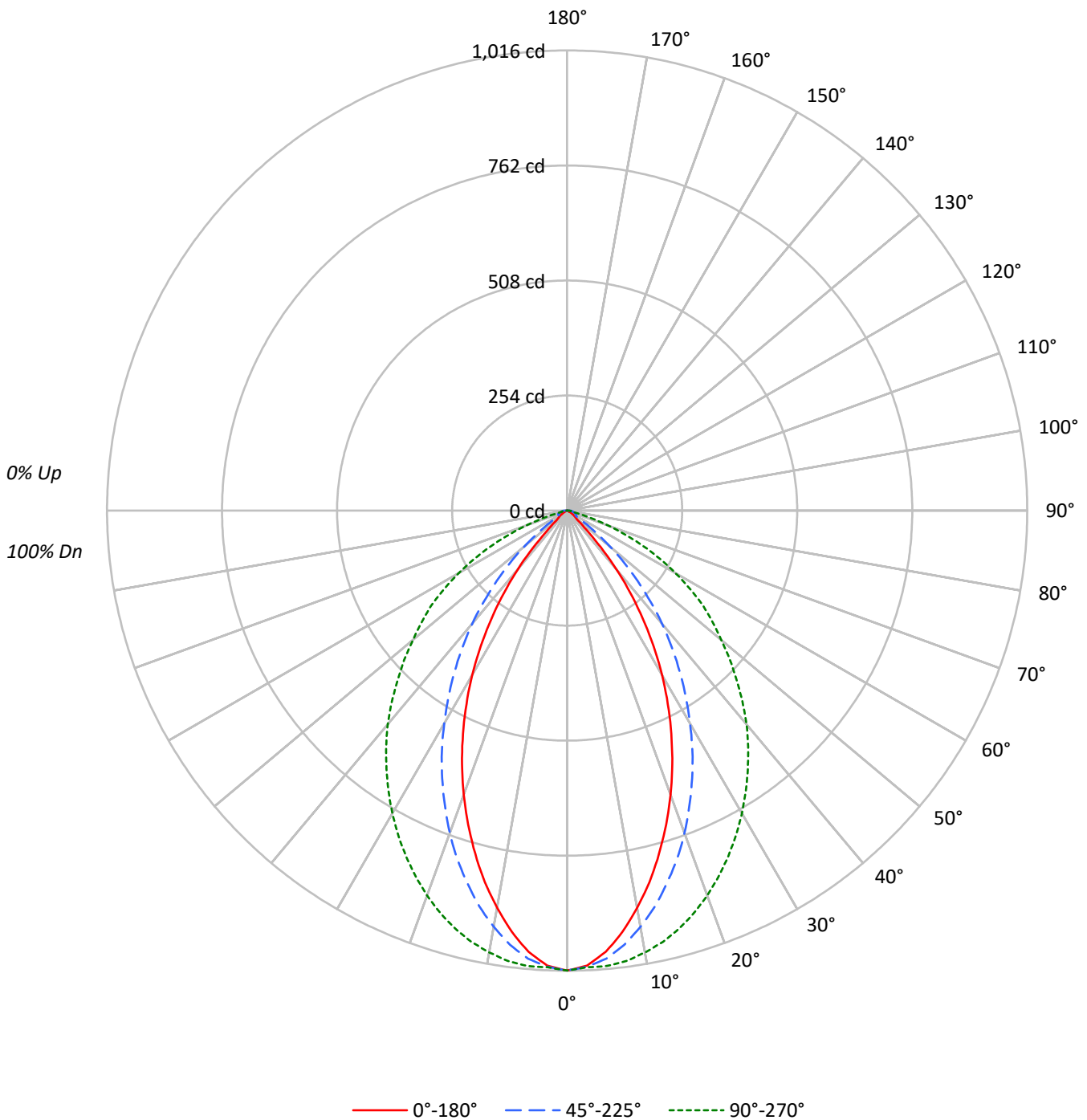
Lumens per Lamp: N/A
Luminaire Lumens: 1306.2 lumens
Efficiency: N/A
Efficacy: 37.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1061453

CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061453

CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-S

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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65					65			
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59					59			
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54					54			
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49					49			
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42					42			
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6992	6992	6992
5°	6759	6863	6976
10°	6226	6523	6925
15°	5590	6071	6811
20°	4894	5553	6625
25°	4133	4959	6394
30°	3331	4315	6135
35°	2449	3637	5845
40°	1529	2934	5542
45°	573	2143	5151
50°	268	1340	4756
55°	196	556	4398
60°	138	293	3806
65°	81	347	3016
70°	76	403	1914
75°	101	399	599
80°	151	496	448
85°	300	790	592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5151 cd/sqm



TEST NUMBER: P1061453

CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.1	7.1
10°-20°	241.1	18.5
20°-30°	307.1	23.5
30°-40°	285.8	21.9
40°-50°	195.9	15.0
50°-60°	107.9	8.3
60°-70°	51.1	3.9
70°-80°	16.1	1.2
80°-90°	8.2	0.6
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°	641.3	49.1
0°-40°	927.2	71.0
0°-60°	1230.9	94.2
0°-90°	1306.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1306.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1016	1016	1016	1016	1016	
5°	978	990	993	1000	1009	91
15°	784	809	852	916	956	219
25°	544	578	653	758	842	248
35°	291	333	433	575	695	181
45°	59	99	220	390	529	56
55°	16	19	46	218	366	15
65°	5	6	21	80	185	6
75°	4	6	15	16	22	4
85°	4	9	10	9	8	4
90°	0	0	0	0	0	



TEST NUMBER: P1061453

CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1015.5	1015.5	1015.5	1015.5	1015.5
2.5°	1005.5	1015.5	1008.0	1008.0	1009.3
5°	978.0	990.5	993.0	1000.5	1009.3
7.5°	938.0	954.3	966.8	988.0	1003.0
10°	890.5	910.5	933.0	968.0	990.5
12.5°	840.4	861.7	895.5	944.2	975.5
15°	784.2	809.2	851.7	915.5	955.5
17.5°	726.6	754.1	806.7	881.7	931.7
20°	667.9	696.6	757.9	841.7	904.2
22.5°	606.6	637.8	705.4	800.4	874.2
25°	544.0	577.8	652.8	757.9	841.7
27.5°	481.5	516.5	599.1	714.1	807.9
30°	419.0	455.2	542.8	669.1	771.7
32.5°	355.2	395.2	487.8	624.1	734.1
35°	291.4	332.7	432.7	575.3	695.4
37.5°	228.9	271.4	378.9	529.0	656.6
40°	170.1	212.6	326.4	482.8	616.6
42.5°	110.1	155.1	271.4	435.2	572.8
45°	58.8	98.8	220.1	390.2	529.0
47.5°	31.3	52.5	171.3	345.2	487.8
50°	25.0	28.8	125.1	300.2	444.0
52.5°	20.0	22.5	80.0	253.9	405.2
55°	16.3	18.8	46.3	217.6	366.4
57.5°	12.5	15.0	26.3	181.3	321.4
60°	10.0	11.3	21.3	145.1	276.4
62.5°	6.3	8.8	21.3	112.6	231.4
65°	5.0	6.3	21.3	80.0	185.1
67.5°	5.0	5.0	21.3	52.5	138.8
70°	3.8	3.8	20.0	33.8	95.1
72.5°	3.8	3.8	17.5	22.5	55.0
75°	3.8	6.3	15.0	16.3	22.5
77.5°	3.8	10.0	13.8	13.8	12.5
80°	3.8	10.0	12.5	11.3	11.3
82.5°	3.8	10.0	10.0	10.0	8.8
85°	3.8	8.8	10.0	8.8	7.5
87.5°	3.8	8.8	8.8	8.8	5.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061453
 CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-S

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	0.00	15.80	17.09	16.17	17.40	17.71
	3H	0.00	0.00	0.00	0.00	0.00	16.59	17.73	16.97	18.06	18.42
	4H	0.00	0.00	0.00	0.00	0.07	16.61	17.67	17.02	18.02	18.41
	6H	0.00	0.49	0.00	0.86	1.25	16.57	17.54	16.99	17.91	18.31
	8H	0.20	1.12	0.63	1.51	1.91	16.55	17.47	16.98	17.86	18.26
	12H	0.95	1.83	1.39	2.22	2.65	16.53	17.41	16.96	17.79	18.22
4H	2H	0.00	0.65	0.00	1.00	1.38	15.58	16.64	15.99	16.99	17.38
	3H	0.46	1.33	0.88	1.73	2.14	16.41	17.27	16.82	17.68	18.08
	4H	1.07	1.84	1.51	2.26	2.70	16.45	17.22	16.88	17.64	18.08
	6H	2.57	3.23	3.03	3.68	4.15	16.43	17.10	16.90	17.55	18.01
	8H	3.31	3.93	3.78	4.38	4.85	16.42	17.04	16.89	17.49	17.96
	12H	4.06	4.61	4.55	5.09	5.57	16.42	16.97	16.91	17.45	17.93
8H	4H	3.11	3.73	3.58	4.17	4.64	16.33	16.95	16.80	17.40	17.87
	6H	4.85	5.35	5.35	5.85	6.33	16.33	16.84	16.84	17.34	17.82
	8H	5.80	6.26	6.32	6.77	7.26	16.34	16.79	16.86	17.31	17.80
	12H	6.74	7.14	7.26	7.64	8.21	16.39	16.79	16.90	17.28	17.86
12H	4H	3.41	3.95	3.89	4.44	4.91	16.29	16.84	16.78	17.32	17.80
	6H	5.31	5.76	5.83	6.28	6.77	16.29	16.74	16.81	17.26	17.75
	8H	6.44	6.84	6.95	7.33	7.91	16.33	16.73	16.85	17.23	17.80