

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: P1061455

Luminaire Tested: S125RDRP-S1090D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061455
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S1090D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

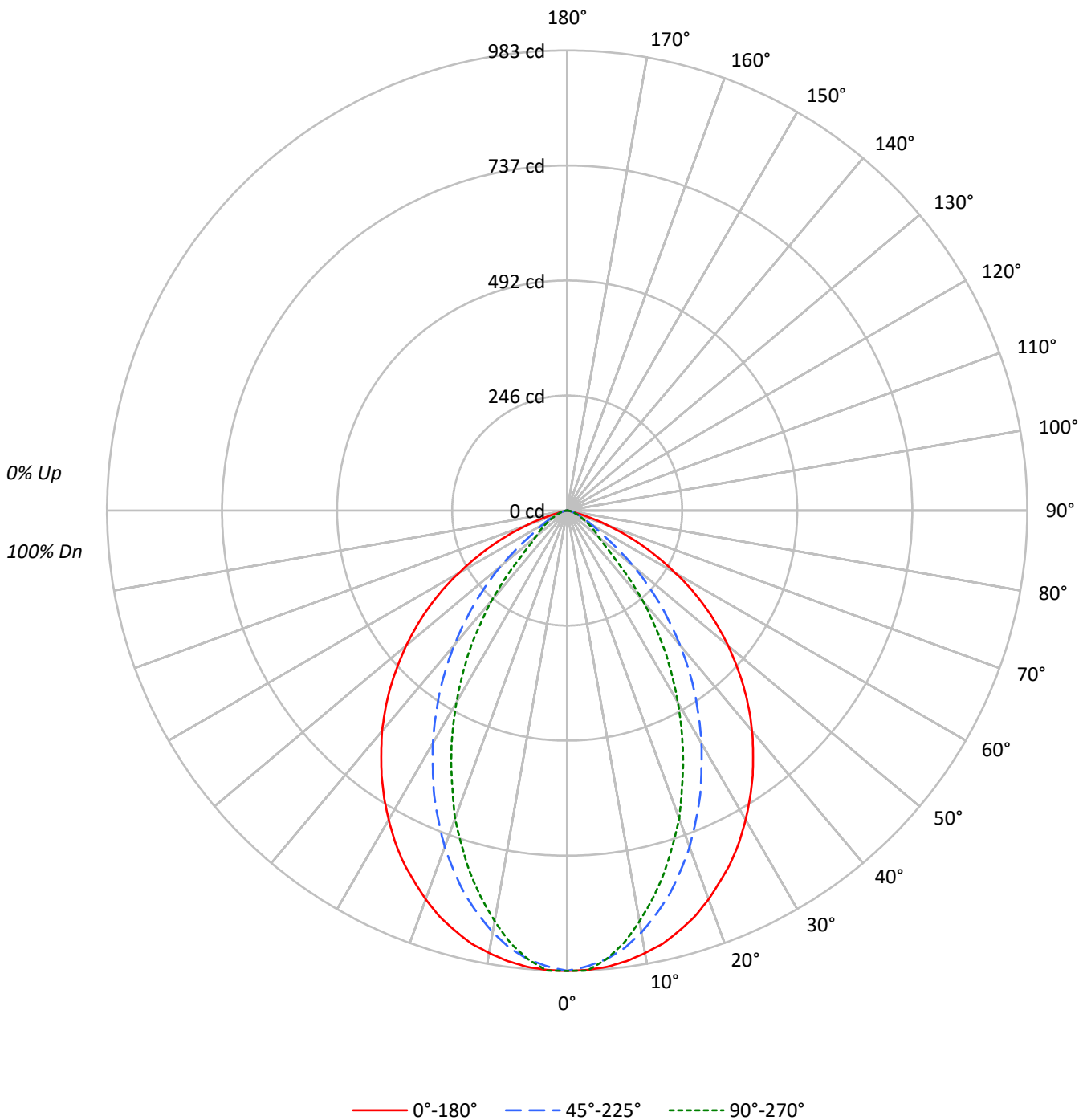
Lumens per Lamp: N/A
Luminaire Lumens: 1422.2 lumens
Efficiency: N/A
Efficacy: 40.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1061455

CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot



TEST NUMBER: P1061455

CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-SVL-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				100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52				52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47				47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43				43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6771	6771	6771
5°	6762	6650	6650
10°	6710	6395	6229
15°	6618	6039	5710
20°	6474	5604	5128
25°	6294	5107	4453
30°	6061	4560	3755
35°	5808	3991	3046
40°	5526	3370	2258
45°	5196	2701	1363
50°	4805	1981	937
55°	4335	1215	780
60°	3682	826	620
65°	2911	630	489
70°	1836	453	403
75°	599	333	333
80°	198	246	297
85°	95	197	197

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5196 cd/sqm



TEST NUMBER: P1061455

CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.0	6.4
10°-20°	240.2	16.9
20°-30°	316.0	22.2
30°-40°	310.5	21.8
40°-50°	234.9	16.5
50°-60°	142.4	10.0
60°-70°	67.2	4.7
70°-80°	17.5	1.2
80°-90°	2.6	0.2
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°	647.1	45.5
0°-40°	957.6	67.3
0°-60°	1334.9	93.9
0°-90°	1422.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1422.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	978	976	962	963	962	93
15°	928	904	847	815	801	262
25°	828	766	672	610	586	381
35°	691	599	475	391	362	432
45°	534	420	277	176	140	411
55°	361	247	101	69	65	321
65°	179	91	39	32	30	176
75°	22	15	12	12	12	35
85°	1	1	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P1061455

CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	983.4	983.4	983.4	983.4	983.4
2.5°	982.2	982.2	974.7	983.4	983.4
5°	978.4	975.9	962.2	963.4	962.2
7.5°	970.9	965.9	942.2	936.0	931.0
10°	959.7	949.7	914.7	899.7	891.0
12.5°	947.2	929.7	882.2	861.0	847.2
15°	928.5	903.5	847.2	814.7	801.0
17.5°	908.5	872.2	806.0	767.3	749.8
20°	883.5	841.0	764.8	717.3	699.8
22.5°	856.0	806.0	717.3	664.8	641.0
25°	828.5	766.0	672.3	609.8	586.1
27.5°	797.2	726.0	621.1	556.1	529.8
30°	762.3	686.0	573.6	506.1	472.3
32.5°	727.3	644.8	523.6	449.9	416.1
35°	691.0	598.6	474.8	391.1	362.4
37.5°	652.3	554.8	424.9	337.4	303.7
40°	614.8	511.1	374.9	282.4	251.2
42.5°	574.8	467.4	324.9	228.7	193.7
45°	533.6	419.9	277.4	176.2	140.0
47.5°	491.1	377.4	229.9	130.0	105.0
50°	448.6	332.4	184.9	96.2	87.5
52.5°	404.9	288.7	140.0	80.0	76.2
55°	361.1	247.4	101.2	68.7	65.0
57.5°	316.1	202.4	76.2	58.7	55.0
60°	267.4	162.4	60.0	48.7	45.0
62.5°	222.4	127.5	48.7	40.0	37.5
65°	178.7	91.2	38.7	32.5	30.0
67.5°	133.7	61.2	30.0	25.0	25.0
70°	91.2	40.0	22.5	20.0	20.0
72.5°	55.0	23.7	16.2	16.2	16.2
75°	22.5	15.0	12.5	12.5	12.5
77.5°	7.5	8.7	8.7	10.0	10.0
80°	5.0	5.0	6.2	7.5	7.5
82.5°	2.5	3.7	3.7	5.0	5.0
85°	1.2	1.2	2.5	2.5	2.5
87.5°	0.0	0.0	0.0	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1061455
 CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-SVL-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	15.97	17.30	16.34	17.62	17.93	6.63	7.96	6.99	8.27	8.59
	3H	16.68	17.86	17.06	18.19	18.55	7.41	8.59	7.79	8.92	9.28
	4H	16.70	17.79	17.10	18.14	18.53	7.66	8.75	8.06	9.10	9.49
	6H	16.63	17.63	17.04	18.00	18.40	7.84	8.84	8.25	9.21	9.61
	8H	16.59	17.54	17.02	17.93	18.33	7.88	8.83	8.31	9.22	9.63
	12H	16.54	17.45	16.98	17.84	18.27	7.89	8.80	8.32	9.18	9.61
4H	2H	15.80	16.90	16.21	17.25	17.63	7.11	8.21	7.52	8.56	8.94
	3H	16.55	17.44	16.96	17.85	18.25	8.02	8.91	8.43	9.32	9.72
	4H	16.57	17.36	17.00	17.78	18.23	8.34	9.13	8.77	9.55	9.99
	6H	16.51	17.19	16.97	17.64	18.10	8.60	9.28	9.06	9.73	10.19
	8H	16.46	17.09	16.93	17.54	18.01	8.66	9.30	9.13	9.75	10.22
	12H	16.41	16.97	16.90	17.46	17.93	8.69	9.25	9.17	9.73	10.21
8H	4H	16.45	17.09	16.92	17.54	18.01	8.45	9.09	8.92	9.53	10.00
	6H	16.38	16.90	16.88	17.39	17.87	8.77	9.29	9.27	9.78	10.26
	8H	16.32	16.79	16.84	17.30	17.80	8.87	9.34	9.39	9.85	10.34
	12H	16.28	16.69	16.80	17.19	17.76	8.93	9.34	9.45	9.84	10.41
12H	4H	16.41	16.97	16.89	17.45	17.93	8.42	8.98	8.90	9.46	9.94
	6H	16.32	16.78	16.84	17.30	17.79	8.74	9.20	9.26	9.72	10.21
	8H	16.28	16.69	16.80	17.19	17.76	8.88	9.29	9.39	9.78	10.35