

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: P1061454

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
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-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

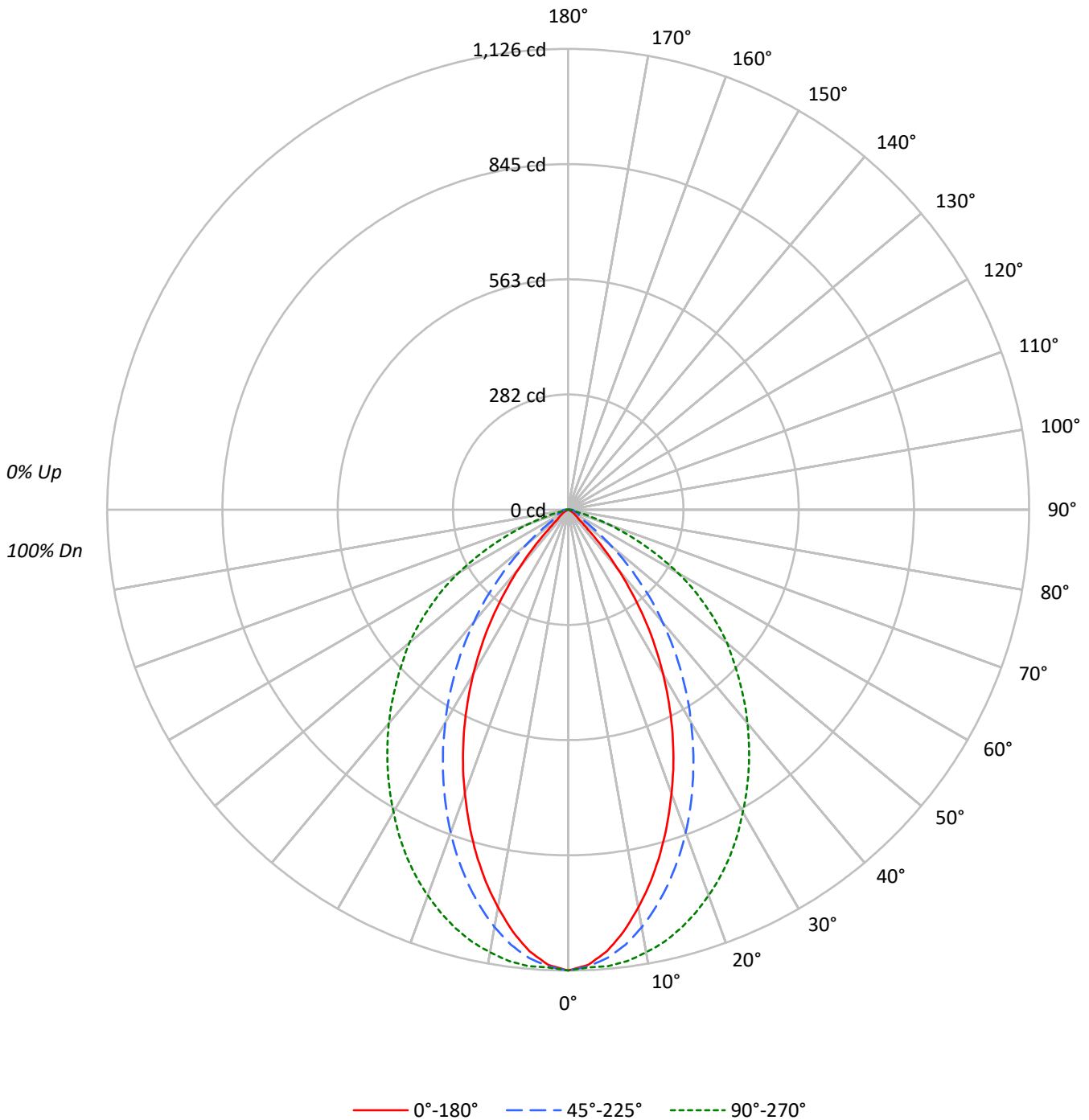
Lumens per Lamp: N/A
Luminaire Lumens: 1456.5 lumens
Efficiency: N/A
Efficacy: 41.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1061454

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

Luminous Intensity Polar Plot





TEST NUMBER: P1061454

CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-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	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	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80					80			
3	98	89	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	67	74	70	67	65					65			
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59					59			
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53					53			
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49					49			
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45					45			
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7751	7751	7751
5°	7487	7599	7737
10°	6900	7241	7678
15°	6196	6740	7552
20°	5407	6150	7351
25°	4580	5483	7099
30°	3679	4773	6782
35°	2723	4027	6466
40°	1686	3215	6127
45°	657	2351	5762
50°	308	1474	5426
55°	226	630	4925
60°	156	448	4272
65°	103	469	3322
70°	101	429	2090
75°	133	434	665
80°	198	496	448
85°	300	987	695

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5762 cd/sqm



TEST NUMBER: P1061454

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.2	7.1
10°-20°	267.5	18.4
20°-30°	340.7	23.4
30°-40°	317.1	21.8
40°-50°	218.3	15.0
50°-60°	123.6	8.5
60°-70°	58.4	4.0
70°-80°	18.3	1.3
80°-90°	9.5	0.7
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°	711.4	48.8
0°-40°	1028.5	70.6
0°-60°	1370.4	94.1
0°-90°	1456.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1456.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1083	1098	1100	1110	1120	100
15°	869	898	946	1017	1060	242
25°	603	642	722	843	934	275
35°	324	369	479	643	769	200
45°	68	108	241	436	592	64
55°	19	21	52	251	410	17
65°	6	8	29	90	204	7
75°	5	11	16	18	25	5
85°	4	10	12	11	9	4
90°	0	0	0	0	0	



TEST NUMBER: P1061454

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1125.8	1125.8	1125.8	1125.8	1125.8
2.5°	1113.3	1124.5	1117.0	1118.3	1119.5
5°	1083.2	1098.2	1099.5	1109.5	1119.5
7.5°	1039.5	1058.2	1072.0	1095.7	1112.0
10°	986.9	1009.4	1035.7	1074.5	1098.2
12.5°	930.6	956.9	993.2	1048.2	1082.0
15°	869.3	898.1	945.6	1016.9	1059.5
17.5°	804.3	836.8	894.4	979.4	1033.2
20°	738.0	773.0	839.3	936.9	1003.2
22.5°	671.7	708.0	781.8	890.6	970.7
25°	602.9	641.7	721.7	843.1	934.4
27.5°	532.9	572.9	661.7	794.3	895.6
30°	462.8	505.3	600.4	744.3	853.1
32.5°	394.0	436.5	540.4	694.2	811.8
35°	324.0	369.0	479.1	642.9	769.3
37.5°	253.9	302.7	419.0	590.4	725.5
40°	187.6	233.9	357.7	539.1	681.7
42.5°	125.1	170.1	302.7	487.8	636.7
45°	67.5	107.6	241.4	436.5	591.7
47.5°	36.3	57.5	188.9	386.5	547.9
50°	28.8	32.5	137.6	340.2	506.6
52.5°	23.8	26.3	90.1	296.5	459.1
55°	18.8	21.3	52.5	251.4	410.3
57.5°	15.0	17.5	33.8	208.9	362.7
60°	11.3	13.8	32.5	167.6	310.2
62.5°	8.8	10.0	30.0	128.8	255.2
65°	6.3	7.5	28.8	90.1	203.9
67.5°	5.0	6.3	26.3	57.5	152.6
70°	5.0	5.0	21.3	37.5	103.8
72.5°	5.0	8.8	18.8	25.0	62.5
75°	5.0	11.3	16.3	17.5	25.0
77.5°	5.0	12.5	13.8	13.8	13.8
80°	5.0	11.3	12.5	12.5	11.3
82.5°	5.0	10.0	11.3	12.5	10.0
85°	3.8	10.0	12.5	11.3	8.8
87.5°	3.8	10.0	11.3	10.0	6.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061454
 CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-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	0.00	0.00	0.00	0.00	0.00	16.36	17.65	16.72	17.96	18.28
	3H	0.00	0.00	0.00	0.01	0.37	17.08	18.22	17.46	18.55	18.92
	4H	0.00	0.50	0.00	0.85	1.23	17.10	18.17	17.51	18.52	18.90
	6H	0.70	1.67	1.11	2.04	2.44	17.05	18.03	17.47	18.40	18.79
	8H	1.34	2.26	1.77	2.65	3.06	17.03	17.95	17.46	18.34	18.75
	12H	1.93	2.82	2.37	3.20	3.63	17.01	17.90	17.45	18.28	18.71
4H	2H	0.87	1.93	1.27	2.29	2.67	16.15	17.21	16.55	17.56	17.95
	3H	1.69	2.55	2.10	2.96	3.36	16.91	17.77	17.32	18.18	18.58
	4H	2.70	3.47	3.13	3.89	4.34	16.94	17.71	17.37	18.13	18.57
	6H	3.98	4.64	4.44	5.09	5.56	16.91	17.58	17.38	18.03	18.50
	8H	4.56	5.18	5.03	5.63	6.10	16.90	17.52	17.37	17.97	18.44
	12H	5.12	5.67	5.61	6.16	6.63	16.91	17.46	17.39	17.94	18.41
8H	4H	4.11	4.74	4.58	5.19	5.66	16.82	17.44	17.29	17.89	18.36
	6H	5.68	6.18	6.18	6.68	7.16	16.81	17.32	17.31	17.81	18.30
	8H	6.47	6.92	6.99	7.44	7.93	16.82	17.28	17.34	17.79	18.29
	12H	7.31	7.71	7.82	8.21	8.78	16.88	17.28	17.40	17.78	18.35
12H	4H	4.34	4.88	4.82	5.37	5.84	16.78	17.33	17.26	17.81	18.28
	6H	6.05	6.50	6.57	7.02	7.51	16.76	17.22	17.29	17.74	18.23
	8H	7.04	7.44	7.55	7.93	8.51	16.81	17.21	17.33	17.71	18.28