

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: P1061990

Luminaire Tested: S125RDR-H1270D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

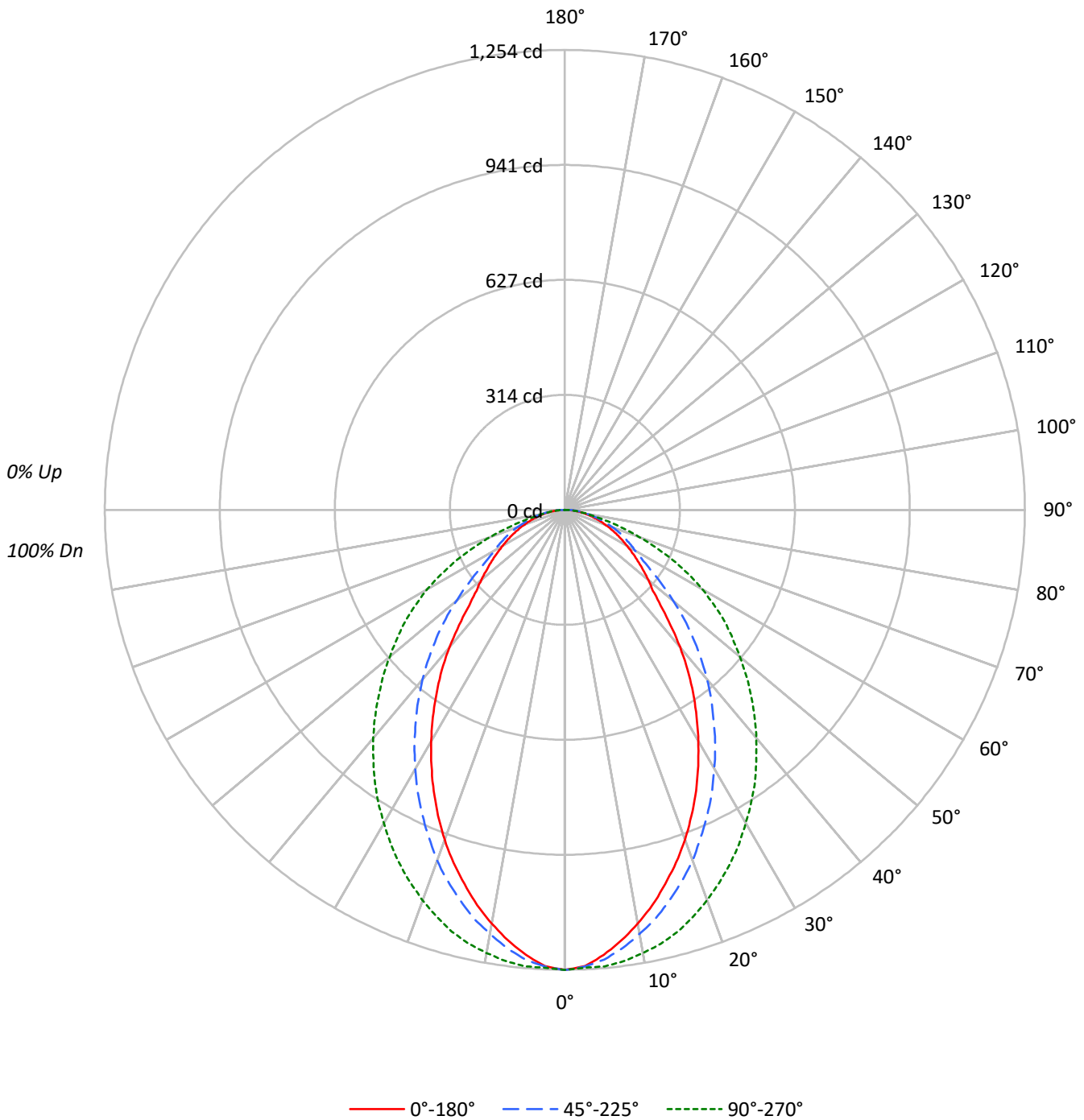
Test Method: LM-79-2019  
Report Number: P1061990  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1270D940-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2351.7 lumens  
Efficiency: N/A  
Efficacy: 64.4 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.5  
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: P1061990  
CATALOG NUMBER: S125RDR-H1270D940-X4F0-XX-UDD-WVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1061990

CATALOG NUMBER: S125RDR-H1270D940-X4F0-XX-UDD-WVL-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8638	8638	8638
5°	8419	8505	8635
10°	8008	8210	8578
15°	7530	7861	8486
20°	7015	7456	8301
25°	6426	6979	8092
30°	5789	6476	7841
35°	5120	5952	7595
40°	4392	5418	7299
45°	3587	4820	6992
50°	3181	4135	6671
55°	2918	3430	6393
60°	2692	3038	5954
65°	2511	2920	5308
70°	2345	2776	4340
75°	2168	2599	3200
80°	2038	2435	2335
85°	1880	2378	1983

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6992 cd/sqm



TEST NUMBER: P1061990

CATALOG NUMBER: S125RDR-H1270D940-X4F0-XX-UDD-WVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.1	4.9
10°-20°	312.7	13.3
20°-30°	429.8	18.3
30°-40°	455.5	19.4
40°-50°	397.6	16.9
50°-60°	302.0	12.8
60°-70°	202.4	8.6
70°-80°	104.4	4.4
80°-90°	31.3	1.3
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°	858.6	36.5
0°-40°	1314.0	55.9
0°-60°	2013.6	85.6
0°-90°	2351.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2351.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1218	1231	1231	1239	1249	114
15°	1056	1076	1103	1152	1190	296
25°	846	872	919	995	1065	388
35°	609	644	708	808	904	380
45°	368	405	495	613	718	291
55°	243	251	286	420	533	218
65°	154	158	179	239	326	153
75°	82	86	98	104	120	87
85°	24	30	30	28	25	27
90°	0	0	0	0	0	



TEST NUMBER: P1061990

CATALOG NUMBER: S125RDR-H1270D940-X4F0-XX-UDD-WVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1254.5	1254.5	1254.5	1254.5	1254.5
2.5°	1245.7	1254.5	1246.9	1246.9	1249.4
5°	1218.1	1230.6	1230.6	1239.4	1249.4
7.5°	1184.3	1198.1	1205.6	1225.6	1240.7
10°	1145.4	1160.5	1174.3	1204.3	1226.9
12.5°	1104.1	1120.4	1141.7	1180.5	1211.8
15°	1056.4	1076.5	1102.8	1151.7	1190.5
17.5°	1008.8	1028.9	1061.5	1119.1	1163.0
20°	957.4	978.8	1017.6	1080.3	1132.9
22.5°	902.3	926.1	967.5	1038.9	1100.3
25°	845.9	872.2	918.6	995.0	1065.2
27.5°	787.0	818.3	868.5	949.9	1027.6
30°	728.1	759.4	814.6	903.6	986.3
32.5°	669.2	703.0	763.2	857.2	946.2
35°	609.1	644.1	708.1	808.3	903.6
37.5°	550.2	585.2	656.7	760.7	857.2
40°	488.7	525.1	602.8	711.8	812.1
42.5°	426.1	464.9	548.9	661.7	765.7
45°	368.4	404.8	495.0	612.8	718.1
47.5°	325.8	349.6	441.1	562.7	671.7
50°	297.0	309.5	386.0	513.8	622.8
52.5°	268.2	278.2	334.6	463.7	576.5
55°	243.1	250.6	285.7	419.8	532.6
57.5°	218.1	225.6	248.1	376.0	481.2
60°	195.5	201.8	220.6	329.6	432.4
62.5°	174.2	179.2	199.3	285.7	379.7
65°	154.1	157.9	179.2	239.4	325.8
67.5°	134.1	137.9	159.2	195.5	268.2
70°	116.5	117.8	137.9	159.2	215.6
72.5°	99.0	100.3	116.5	129.1	165.4
75°	81.5	86.5	97.7	104.0	120.3
77.5°	66.4	72.7	79.0	81.5	81.5
80°	51.4	58.9	61.4	61.4	58.9
82.5°	37.6	43.9	45.1	42.6	40.1
85°	23.8	30.1	30.1	27.6	25.1
87.5°	11.3	16.3	16.3	15.0	11.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061990  
 CATALOG NUMBER: S125RDR-H1270D940-X4F0-XX-UDD-WVL-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	14.10	15.60	14.46	15.91	16.22	18.03	19.52	18.39	19.84	20.15
	3H	15.67	17.01	16.05	17.34	17.70	19.45	20.79	19.83	21.12	21.48
	4H	16.28	17.54	16.68	17.89	18.27	19.86	21.12	20.26	21.47	21.85
	6H	16.78	17.94	17.19	18.31	18.70	20.08	21.24	20.49	21.61	22.00
	8H	16.95	18.06	17.38	18.45	18.85	20.14	21.24	20.56	21.63	22.04
	12H	17.07	18.13	17.51	18.52	18.95	20.17	21.23	20.60	21.61	22.04
4H	2H	14.84	16.09	15.24	16.44	16.82	18.15	19.41	18.55	19.76	20.14
	3H	16.61	17.66	17.03	18.06	18.46	19.76	20.81	20.17	21.21	21.61
	4H	17.35	18.29	17.78	18.71	19.15	20.29	21.23	20.72	21.65	22.08
	6H	17.99	18.80	18.44	19.25	19.71	20.63	21.45	21.09	21.89	22.35
	8H	18.21	18.98	18.68	19.42	19.89	20.73	21.50	21.19	21.94	22.41
	12H	18.39	19.07	18.87	19.55	20.02	20.80	21.49	21.29	21.97	22.44
8H	4H	17.75	18.52	18.21	18.96	19.43	20.40	21.16	20.86	21.60	22.07
	6H	18.54	19.17	19.03	19.66	20.14	20.83	21.47	21.33	21.96	22.44
	8H	18.86	19.43	19.38	19.94	20.43	20.99	21.56	21.51	22.07	22.56
	12H	19.14	19.64	19.65	20.13	20.69	21.13	21.63	21.64	22.12	22.69
12H	4H	17.79	18.48	18.28	18.96	19.43	20.40	21.08	20.88	21.56	22.03
	6H	18.62	19.19	19.13	19.70	20.19	20.85	21.42	21.36	21.93	22.42
	8H	19.02	19.52	19.53	20.01	20.57	21.06	21.56	21.57	22.05	22.62