

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: P1061921

Luminaire Tested: S125RDRP-H1270D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061921  
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-H1270D830-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

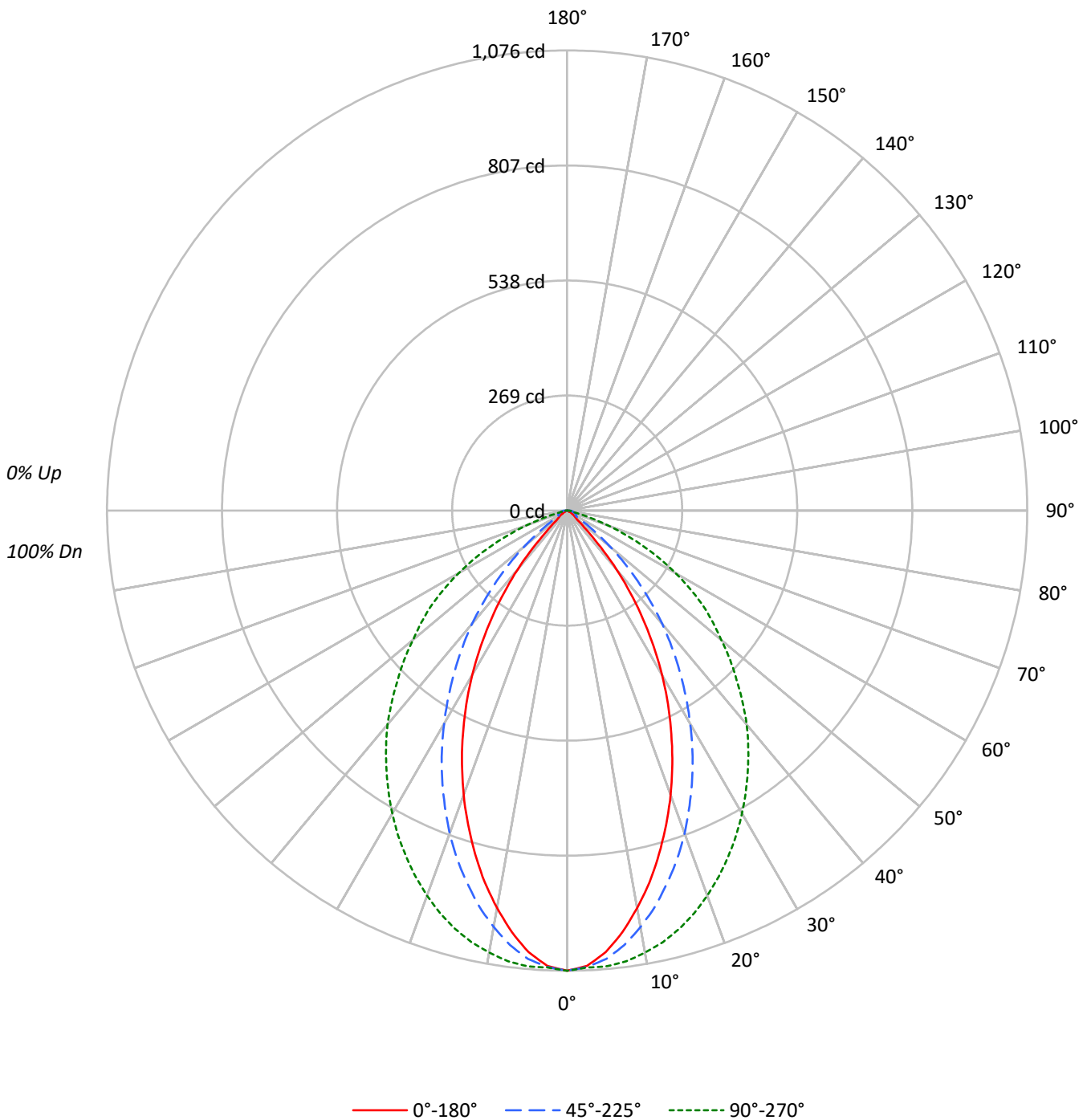
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1384.0 lumens  
Efficiency: N/A  
Efficacy: 37.9 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): 36.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

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### Luminous Intensity Polar Plot





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**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°	7409	7409	7409
5°	7162	7272	7391
10°	6596	6912	7338
15°	5923	6432	7217
20°	5185	5884	7020
25°	4379	5255	6775
30°	3529	4572	6500
35°	2596	3854	6193
40°	1620	3109	5872
45°	607	2271	5458
50°	284	1419	5039
55°	206	588	4661
60°	146	310	4033
65°	86	367	3195
70°	81	427	2027
75°	106	423	636
80°	159	527	472
85°	316	837	632

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5458 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.7	7.1
10°-20°	255.4	18.5
20°-30°	325.4	23.5
30°-40°	302.9	21.9
40°-50°	207.5	15.0
50°-60°	114.3	8.3
60°-70°	54.1	3.9
70°-80°	17.0	1.2
80°-90°	8.7	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°	679.5	49.1
0°-40°	982.4	71.0
0°-60°	1304.2	94.2
0°-90°	1384.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1384.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1036	1050	1052	1060	1069	96
15°	831	857	902	970	1012	232
25°	576	612	692	803	892	263
35°	309	352	458	610	737	191
45°	62	105	233	414	560	59
55°	17	20	49	231	388	16
65°	5	7	22	85	196	6
75°	4	7	16	17	24	4
85°	4	9	11	9	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1076.0	1076.0	1076.0	1076.0	1076.0
2.5°	1065.4	1076.0	1068.1	1068.1	1069.4
5°	1036.3	1049.5	1052.2	1060.1	1069.4
7.5°	993.9	1011.1	1024.4	1046.9	1062.8
10°	943.5	964.7	988.6	1025.7	1049.5
12.5°	890.5	913.0	948.8	1000.5	1033.6
15°	830.9	857.4	902.4	970.0	1012.4
17.5°	769.9	799.1	854.7	934.2	987.3
20°	707.6	738.1	803.1	891.8	958.1
22.5°	642.7	675.8	747.4	848.1	926.3
25°	576.4	612.2	691.7	803.1	891.8
27.5°	510.2	547.3	634.8	756.7	856.1
30°	443.9	482.4	575.1	709.0	817.6
32.5°	376.3	418.8	516.8	661.3	777.9
35°	308.8	352.5	458.5	609.6	736.8
37.5°	242.5	287.6	401.5	560.5	695.7
40°	180.2	225.3	345.9	511.5	653.3
42.5°	116.6	164.3	287.6	461.2	606.9
45°	62.3	104.7	233.2	413.5	560.5
47.5°	33.1	55.7	181.5	365.7	516.8
50°	26.5	30.5	132.5	318.0	470.4
52.5°	21.2	23.9	84.8	269.0	429.4
55°	17.2	19.9	49.0	230.6	388.3
57.5°	13.3	15.9	27.8	192.1	340.6
60°	10.6	11.9	22.5	153.7	292.9
62.5°	6.6	9.3	22.5	119.3	245.2
65°	5.3	6.6	22.5	84.8	196.1
67.5°	5.3	5.3	22.5	55.7	147.1
70°	4.0	4.0	21.2	35.8	100.7
72.5°	4.0	4.0	18.6	23.9	58.3
75°	4.0	6.6	15.9	17.2	23.9
77.5°	4.0	10.6	14.6	14.6	13.3
80°	4.0	10.6	13.3	11.9	11.9
82.5°	4.0	10.6	10.6	10.6	9.3
85°	4.0	9.3	10.6	9.3	8.0
87.5°	4.0	9.3	9.3	9.3	5.3
90°	0.0	0.0	0.0	0.0	0.0

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**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	16.00	17.29	16.37	17.60	17.92
	3H	0.00	0.00	0.00	0.00	0.00	16.79	17.93	17.17	18.26	18.62
	4H	0.00	0.00	0.00	0.00	0.26	16.82	17.87	17.22	18.22	18.61
	6H	0.00	0.68	0.12	1.05	1.44	16.77	17.74	17.19	18.11	18.51
	8H	0.38	1.30	0.81	1.69	2.10	16.75	17.67	17.18	18.06	18.46
	12H	1.14	2.01	1.57	2.40	2.83	16.73	17.61	17.16	17.99	18.42
4H	2H	0.00	0.84	0.18	1.19	1.57	15.78	16.84	16.19	17.19	17.58
	3H	0.66	1.52	1.07	1.93	2.33	16.61	17.48	17.03	17.88	18.28
	4H	1.25	2.02	1.69	2.44	2.89	16.65	17.42	17.08	17.84	18.28
	6H	2.75	3.42	3.22	3.86	4.33	16.64	17.30	17.10	17.75	18.21
	8H	3.50	4.12	3.97	4.56	5.04	16.62	17.24	17.09	17.69	18.16
	12H	4.24	4.79	4.73	5.27	5.75	16.62	17.17	17.11	17.65	18.13
8H	4H	3.30	3.92	3.77	4.36	4.84	16.53	17.15	17.00	17.60	18.07
	6H	5.05	5.55	5.55	6.05	6.53	16.54	17.04	17.04	17.54	18.02
	8H	6.00	6.45	6.52	6.97	7.46	16.54	17.00	17.06	17.51	18.00
	12H	6.94	7.34	7.45	7.83	8.40	16.59	16.99	17.10	17.48	18.06
12H	4H	3.60	4.15	4.09	4.63	5.10	16.49	17.04	16.98	17.52	18.00
	6H	5.50	5.96	6.03	6.47	6.97	16.49	16.94	17.01	17.46	17.95
	8H	6.64	7.04	7.15	7.53	8.10	16.53	16.93	17.05	17.43	18.00