

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: P1061922

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061922  
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-H1270D830-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

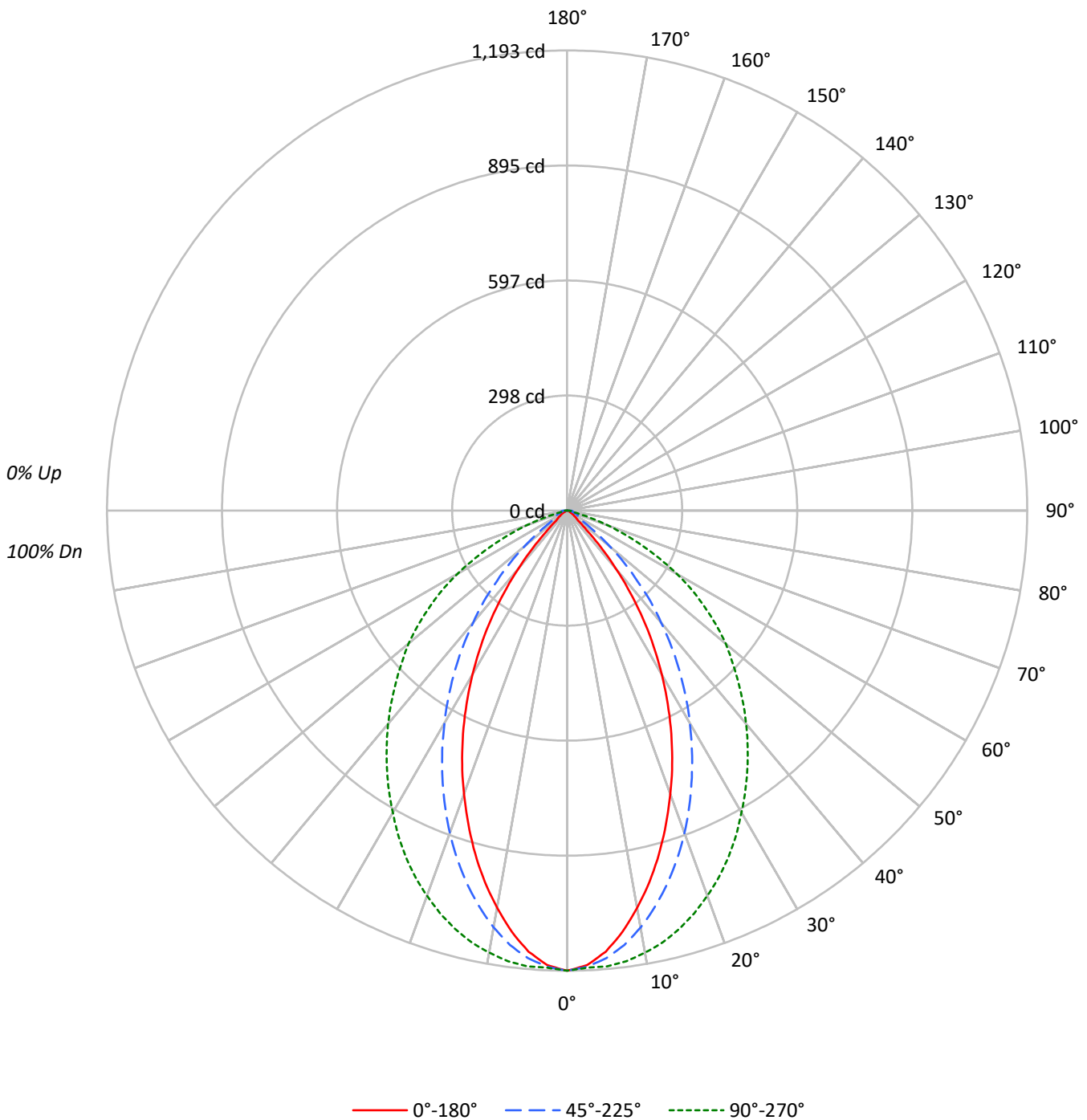
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1543.3 lumens  
Efficiency: N/A  
Efficacy: 42.3 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): 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	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°	8213	8213	8213
5°	7933	8052	8198
10°	7311	7672	8136
15°	6566	7142	8002
20°	5730	6516	7788
25°	4853	5809	7522
30°	3899	5058	7186
35°	2886	4267	6851
40°	1787	3407	6492
45°	697	2491	6104
50°	327	1562	5750
55°	239	669	5218
60°	164	475	4526
65°	108	497	3519
70°	107	453	2214
75°	141	458	705
80°	210	527	472
85°	316	1051	735

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6104 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.4	7.1
10°-20°	283.4	18.4
20°-30°	361.0	23.4
30°-40°	336.0	21.8
40°-50°	231.3	15.0
50°-60°	130.9	8.5
60°-70°	61.9	4.0
70°-80°	19.3	1.3
80°-90°	10.1	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°	753.8	48.8
0°-40°	1089.8	70.6
0°-60°	1452.0	94.1
0°-90°	1543.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1543.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1193	1193	1193	1193	1193	
5°	1148	1164	1165	1176	1186	106
15°	921	952	1002	1078	1123	256
25°	639	680	765	893	990	291
35°	343	391	508	681	815	212
45°	72	114	256	463	627	67
55°	20	22	56	266	435	18
65°	7	8	30	95	216	7
75°	5	12	17	19	26	6
85°	4	11	13	12	9	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1192.8	1192.8	1192.8	1192.8	1192.8
2.5°	1179.6	1191.5	1183.6	1184.9	1186.2
5°	1147.8	1163.7	1165.0	1175.6	1186.2
7.5°	1101.4	1121.3	1135.8	1161.0	1178.3
10°	1045.7	1069.6	1097.4	1138.5	1163.7
12.5°	986.1	1013.9	1052.3	1110.7	1146.4
15°	921.1	951.6	1002.0	1077.5	1122.6
17.5°	852.2	886.7	947.6	1037.8	1094.8
20°	782.0	819.1	889.3	992.7	1062.9
22.5°	711.7	750.2	828.4	943.7	1028.5
25°	638.8	679.9	764.7	893.3	990.1
27.5°	564.6	607.0	701.1	841.6	949.0
30°	490.4	535.4	636.2	788.6	903.9
32.5°	417.5	462.6	572.6	735.6	860.2
35°	343.3	391.0	507.6	681.2	815.1
37.5°	269.0	320.7	444.0	625.6	768.7
40°	198.8	247.8	379.1	571.2	722.3
42.5°	132.5	180.3	320.7	516.9	674.6
45°	71.6	114.0	255.8	462.6	626.9
47.5°	38.4	61.0	200.1	409.5	580.5
50°	30.5	34.5	145.8	360.5	536.8
52.5°	25.2	27.8	95.4	314.1	486.4
55°	19.9	22.5	55.7	266.4	434.7
57.5°	15.9	18.6	35.8	221.3	384.4
60°	11.9	14.6	34.5	177.6	328.7
62.5°	9.3	10.6	31.8	136.5	270.4
65°	6.6	8.0	30.5	95.4	216.0
67.5°	5.3	6.6	27.8	61.0	161.7
70°	5.3	5.3	22.5	39.8	110.0
72.5°	5.3	9.3	19.9	26.5	66.3
75°	5.3	11.9	17.2	18.6	26.5
77.5°	5.3	13.3	14.6	14.6	14.6
80°	5.3	11.9	13.3	13.3	11.9
82.5°	5.3	10.6	11.9	13.3	10.6
85°	4.0	10.6	13.3	11.9	9.3
87.5°	4.0	10.6	11.9	10.6	6.6
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	0.20	16.56	17.85	16.93	18.16	18.48
	3H	0.00	0.00	0.00	0.22	0.58	17.28	18.42	17.66	18.75	19.12
	4H	0.00	0.70	0.04	1.05	1.44	17.30	18.37	17.71	18.72	19.10
	6H	0.90	1.88	1.32	2.25	2.64	17.25	18.23	17.67	18.60	19.00
	8H	1.54	2.46	1.97	2.86	3.26	17.23	18.15	17.66	18.55	18.95
	12H	2.13	3.02	2.57	3.40	3.83	17.22	18.10	17.65	18.48	18.91
4H	2H	1.08	2.14	1.48	2.49	2.88	16.35	17.41	16.75	17.77	18.15
	3H	1.89	2.76	2.30	3.16	3.56	17.11	17.98	17.52	18.38	18.78
	4H	2.89	3.67	3.33	4.09	4.53	17.14	17.91	17.57	18.33	18.78
	6H	4.17	4.84	4.64	5.29	5.75	17.12	17.78	17.58	18.23	18.70
	8H	4.75	5.37	5.22	5.82	6.29	17.10	17.72	17.57	18.17	18.64
	12H	5.32	5.87	5.80	6.35	6.82	17.11	17.66	17.60	18.14	18.62
8H	4H	4.31	4.93	4.78	5.38	5.85	17.02	17.64	17.49	18.09	18.56
	6H	5.87	6.38	6.37	6.88	7.36	17.01	17.52	17.51	18.02	18.50
	8H	6.66	7.12	7.19	7.64	8.13	17.02	17.48	17.55	18.00	18.49
	12H	7.50	7.91	8.02	8.40	8.97	17.08	17.49	17.60	17.98	18.55
12H	4H	4.53	5.08	5.02	5.56	6.04	16.98	17.53	17.47	18.01	18.49
	6H	6.24	6.70	6.76	7.21	7.71	16.96	17.42	17.49	17.94	18.43
	8H	7.23	7.63	7.75	8.13	8.70	17.01	17.42	17.53	17.91	18.48