

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: P1062025

Luminaire Tested: S125RDRP-H375D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1062025  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H375D840-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

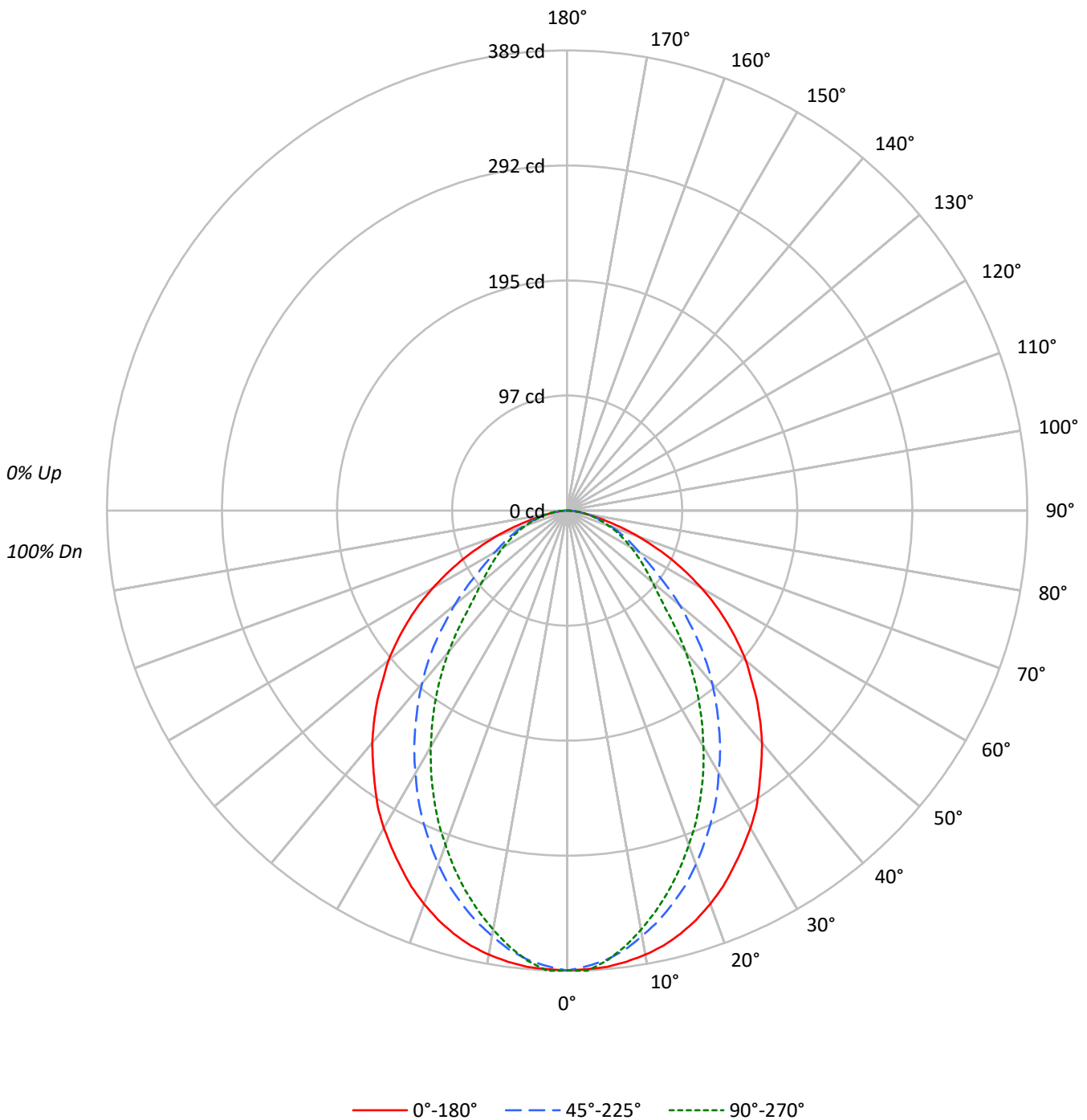
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 736.6 lumens  
Efficiency: N/A  
Efficacy: 63.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75					75			
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65					65			
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57					57			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50					50			
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45					45			
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40					40			
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36					36			
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33					33			
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30					30			

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

	0°	45°	90°
0°	2677	2677	2677
5°	2676	2635	2641
10°	2665	2553	2515
15°	2640	2453	2369
20°	2592	2332	2203
25°	2528	2194	2027
30°	2464	2038	1833
35°	2381	1881	1626
40°	2304	1715	1400
45°	2207	1534	1147
50°	2112	1329	1004
55°	1982	1110	928
60°	1808	971	866
65°	1582	888	805
70°	1284	799	749
75°	920	729	697
80°	634	654	654
85°	466	569	600

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2207 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.1	4.9
10°-20°	97.8	13.3
20°-30°	135.2	18.3
30°-40°	144.0	19.5
40°-50°	126.5	17.2
50°-60°	95.9	13.0
60°-70°	62.3	8.5
70°-80°	30.9	4.2
80°-90°	8.1	1.1
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°	269.1	36.5
0°-40°	413.1	56.1
0°-60°	635.4	86.3
0°-90°	736.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	736.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	389	389	389	389	389	
5°	387	386	381	382	382	37
15°	370	362	344	336	332	104
25°	333	314	289	274	267	153
35°	283	257	224	204	193	177
45°	227	195	158	129	118	175
55°	165	133	92	80	77	147
65°	97	72	54	50	49	96
75°	35	30	27	27	26	39
85°	6	7	7	7	8	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	388.8	388.8	388.8	388.8	388.8
2.5°	388.0	388.8	385.5	388.4	389.3
5°	387.2	386.3	381.2	382.5	382.1
7.5°	384.6	382.9	374.5	373.6	372.0
10°	381.2	377.0	365.2	362.2	359.7
12.5°	376.6	369.8	355.5	349.6	346.6
15°	370.3	361.8	344.1	336.1	332.3
17.5°	362.7	350.8	332.3	321.3	317.1
20°	353.8	339.9	318.3	305.7	300.6
22.5°	344.1	327.6	303.6	290.0	284.6
25°	332.7	314.5	288.8	274.0	266.8
27.5°	321.3	301.0	273.2	256.7	249.1
30°	309.9	286.7	256.3	238.5	230.5
32.5°	297.6	271.9	240.7	221.2	211.9
35°	283.3	257.1	223.8	203.5	193.4
37.5°	269.4	241.5	207.3	184.5	174.8
40°	256.3	226.7	190.8	165.9	155.8
42.5°	241.5	211.1	174.4	148.2	136.8
45°	226.7	195.1	157.5	129.2	117.8
47.5°	211.1	179.9	139.7	111.9	104.3
50°	197.2	164.2	124.1	98.8	93.7
52.5°	181.1	149.0	108.1	88.7	85.3
55°	165.1	132.6	92.5	79.8	77.3
57.5°	148.6	117.8	80.2	72.2	69.7
60°	131.3	102.6	70.5	64.2	62.9
62.5°	114.0	87.0	62.1	57.4	55.7
65°	97.1	72.2	54.5	50.2	49.4
67.5°	79.8	58.7	46.9	43.9	43.5
70°	63.8	47.7	39.7	38.0	37.2
72.5°	49.0	38.0	33.4	32.1	31.7
75°	34.6	30.4	27.4	26.6	26.2
77.5°	23.2	23.2	22.0	21.1	21.5
80°	16.0	16.9	16.5	16.5	16.5
82.5°	10.6	11.4	11.8	11.8	11.8
85°	5.9	6.8	7.2	7.2	7.6
87.5°	2.1	2.5	3.0	3.4	3.4
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	13.97	15.47	14.34	15.78	16.09	10.22	11.71	10.58	12.02	12.34
	3H	15.29	16.62	15.66	16.95	17.31	11.80	13.14	12.18	13.47	13.83
	4H	15.66	16.91	16.06	17.26	17.64	12.40	13.66	12.80	14.01	14.38
	6H	15.83	16.99	16.24	17.35	17.75	12.88	14.03	13.29	14.40	14.79
	8H	15.87	16.97	16.29	17.36	17.76	13.03	14.14	13.46	14.53	14.93
	12H	15.88	16.93	16.31	17.32	17.75	13.15	14.20	13.58	14.58	15.01
4H	2H	14.09	15.34	14.49	15.69	16.07	10.88	12.13	11.28	12.48	12.86
	3H	15.57	16.61	15.99	17.01	17.41	12.66	13.70	13.07	14.10	14.50
	4H	16.05	16.98	16.48	17.40	17.84	13.38	14.31	13.81	14.73	15.17
	6H	16.33	17.15	16.79	17.59	18.05	13.97	14.78	14.43	15.22	15.68
	8H	16.40	17.16	16.87	17.61	18.07	14.17	14.93	14.64	15.37	15.84
	12H	16.44	17.12	16.93	17.60	18.07	14.33	15.00	14.81	15.48	15.95
8H	4H	16.13	16.89	16.60	17.33	17.80	13.69	14.45	14.15	14.89	15.36
	6H	16.50	17.12	16.99	17.61	18.09	14.40	15.02	14.89	15.51	15.99
	8H	16.61	17.17	17.13	17.68	18.17	14.68	15.24	15.19	15.75	16.24
	12H	16.70	17.19	17.21	17.69	18.25	14.91	15.40	15.42	15.89	16.46
12H	4H	16.13	16.80	16.61	17.28	17.75	13.72	14.39	14.20	14.87	15.34
	6H	16.50	17.06	17.01	17.57	18.06	14.45	15.01	14.96	15.52	16.01
	8H	16.66	17.15	17.17	17.65	18.21	14.78	15.28	15.29	15.77	16.34