

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: P1061614

Luminaire Tested: S125RDRP-S375D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061614  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S375D840-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

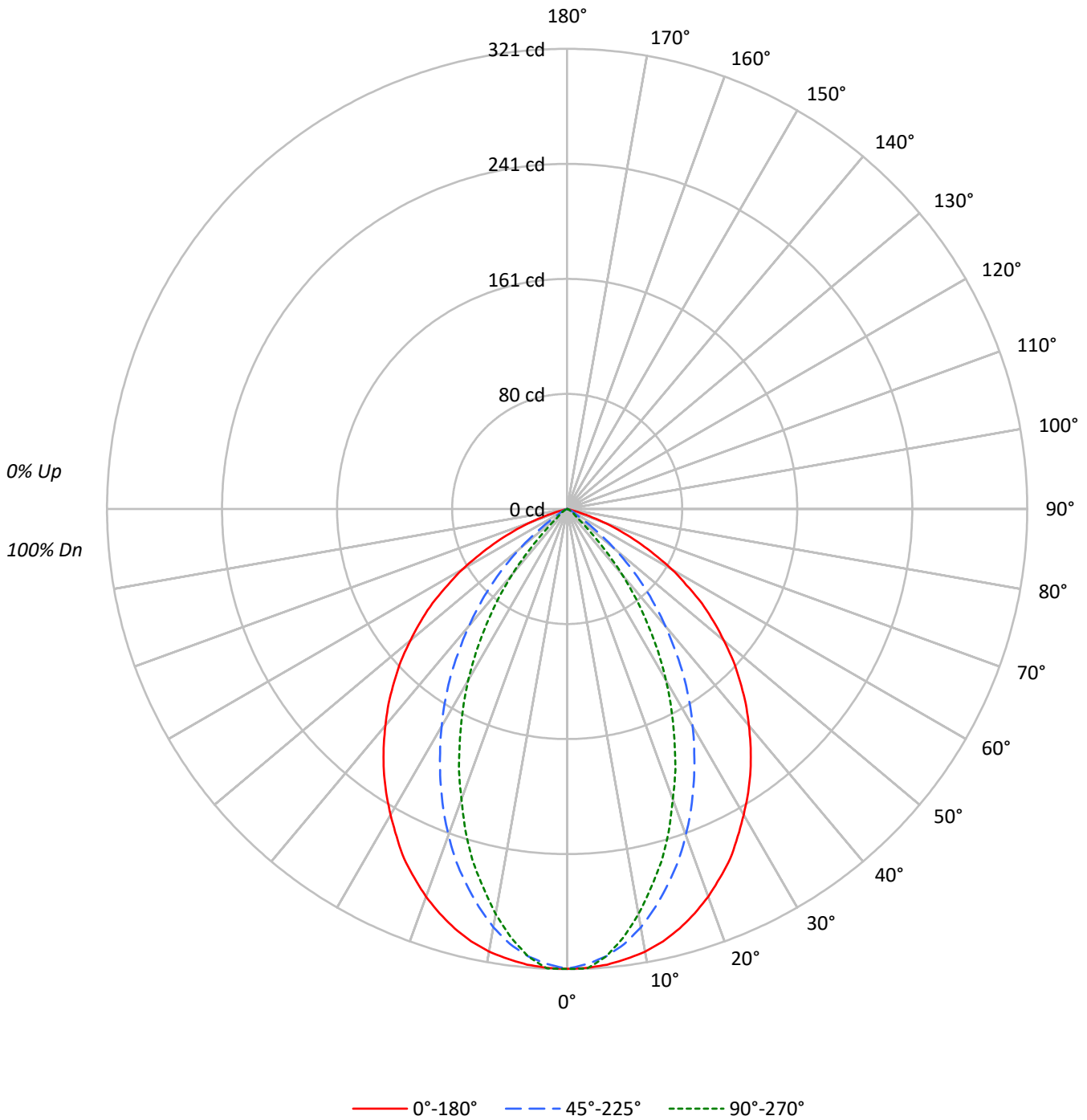
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 414.4 lumens  
Efficiency: N/A  
Efficacy: 33.2 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
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

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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	2209	2209	2209
5°	2205	2165	2165
10°	2193	2072	2006
15°	2160	1934	1813
20°	2109	1774	1578
25°	2045	1589	1344
30°	1958	1393	1097
35°	1874	1189	822
40°	1772	959	533
45°	1661	725	231
50°	1527	463	86
55°	1377	203	61
60°	1165	87	41
65°	883	55	21
70°	538	26	8
75°	112	11	11
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1661 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.6	7.1
10°-20°	77.1	18.6
20°-30°	99.0	23.9
30°-40°	93.2	22.5
40°-50°	65.1	15.7
50°-60°	34.8	8.4
60°-70°	13.9	3.3
70°-80°	1.8	0.4
80°-90°	0.0	0.0
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°	205.6	49.6
0°-40°	298.8	72.1
0°-60°	398.8	96.2
0°-90°	414.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	414.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	321	321	321	321	321	
5°	319	318	313	314	313	30
15°	303	293	271	259	254	85
25°	269	246	209	186	177	124
35°	223	188	141	109	98	139
45°	171	128	74	36	24	132
55°	115	70	17	6	5	102
65°	54	22	3	2	1	54
75°	4	1	0	0	0	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	320.8	320.8	320.8	320.8	320.8
2.5°	320.4	320.8	317.8	320.4	320.8
5°	319.1	318.3	313.2	314.0	313.2
7.5°	316.6	314.5	306.0	303.0	301.3
10°	313.6	309.0	296.3	289.9	286.9
12.5°	309.0	302.2	284.4	274.7	270.4
15°	303.0	293.3	271.3	258.6	254.4
17.5°	295.8	283.1	257.7	242.1	235.7
20°	287.8	270.9	242.1	223.5	215.4
22.5°	278.5	259.0	226.0	205.3	197.2
25°	269.2	245.5	209.1	186.2	176.9
27.5°	257.7	231.5	192.1	167.6	157.4
30°	246.3	217.5	175.2	148.6	138.0
32.5°	234.9	202.7	158.3	128.7	118.1
35°	223.0	187.5	141.4	109.2	97.8
37.5°	210.3	172.3	123.2	90.6	78.7
40°	197.2	157.4	106.7	72.4	59.3
42.5°	184.5	142.6	90.1	54.6	40.2
45°	170.6	127.8	74.5	36.0	23.7
47.5°	157.4	113.4	58.4	20.7	12.3
50°	142.6	98.6	43.2	11.0	8.0
52.5°	128.7	84.2	28.8	7.2	6.3
55°	114.7	70.3	16.9	5.9	5.1
57.5°	98.6	56.7	9.3	4.7	3.8
60°	84.6	44.4	6.3	3.4	3.0
62.5°	68.6	32.6	4.7	2.5	2.1
65°	54.2	21.6	3.4	1.7	1.3
67.5°	40.2	12.7	2.1	0.8	0.8
70°	26.7	6.8	1.3	0.4	0.4
72.5°	14.0	3.0	0.8	0.4	0.4
75°	4.2	1.3	0.4	0.4	0.4
77.5°	0.0	0.4	0.0	0.0	0.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	11.70	12.96	12.06	13.27	13.59	0.00	0.00	0.00	0.00	0.00
	3H	12.28	13.39	12.66	13.72	14.09	0.00	0.00	0.00	0.00	0.00
	4H	12.24	13.28	12.65	13.63	14.01	0.00	0.00	0.00	0.00	0.00
	6H	12.16	13.10	12.57	13.48	13.87	0.00	0.00	0.00	0.00	0.00
	8H	12.11	13.01	12.54	13.40	13.80	0.00	0.00	0.00	0.00	0.00
	12H	12.07	12.92	12.50	13.30	13.73	0.00	0.00	0.00	0.00	0.00
4H	2H	11.47	12.50	11.87	12.85	13.24	0.00	0.00	0.00	0.00	0.00
	3H	12.06	12.90	12.48	13.30	13.71	0.00	0.00	0.00	0.00	0.00
	4H	12.01	12.75	12.45	13.17	13.62	0.00	0.00	0.00	0.00	0.00
	6H	11.92	12.56	12.39	13.01	13.48	0.00	0.00	0.00	0.00	0.00
	8H	11.86	12.46	12.34	12.91	13.38	0.00	0.00	0.00	0.00	0.00
	12H	11.81	12.33	12.30	12.82	13.29	0.00	0.00	0.00	0.00	0.00
8H	4H	11.86	12.46	12.34	12.91	13.38	0.00	0.00	0.00	0.00	0.00
	6H	11.76	12.24	12.26	12.74	13.22	0.00	0.00	0.00	0.00	0.00
	8H	11.69	12.12	12.22	12.64	13.13	0.00	0.00	0.00	0.00	0.00
	12H	11.64	12.02	12.16	12.52	13.09	0.00	0.00	0.00	0.00	0.00
12H	4H	11.81	12.33	12.30	12.82	13.29	0.00	0.00	0.00	0.00	0.00
	6H	11.69	12.12	12.22	12.64	13.13	0.00	0.00	0.00	0.00	0.00
	8H	11.64	12.02	12.16	12.52	13.09	0.00	0.00	0.00	0.00	0.00