

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: P1061616

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061616  
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-S375D840-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

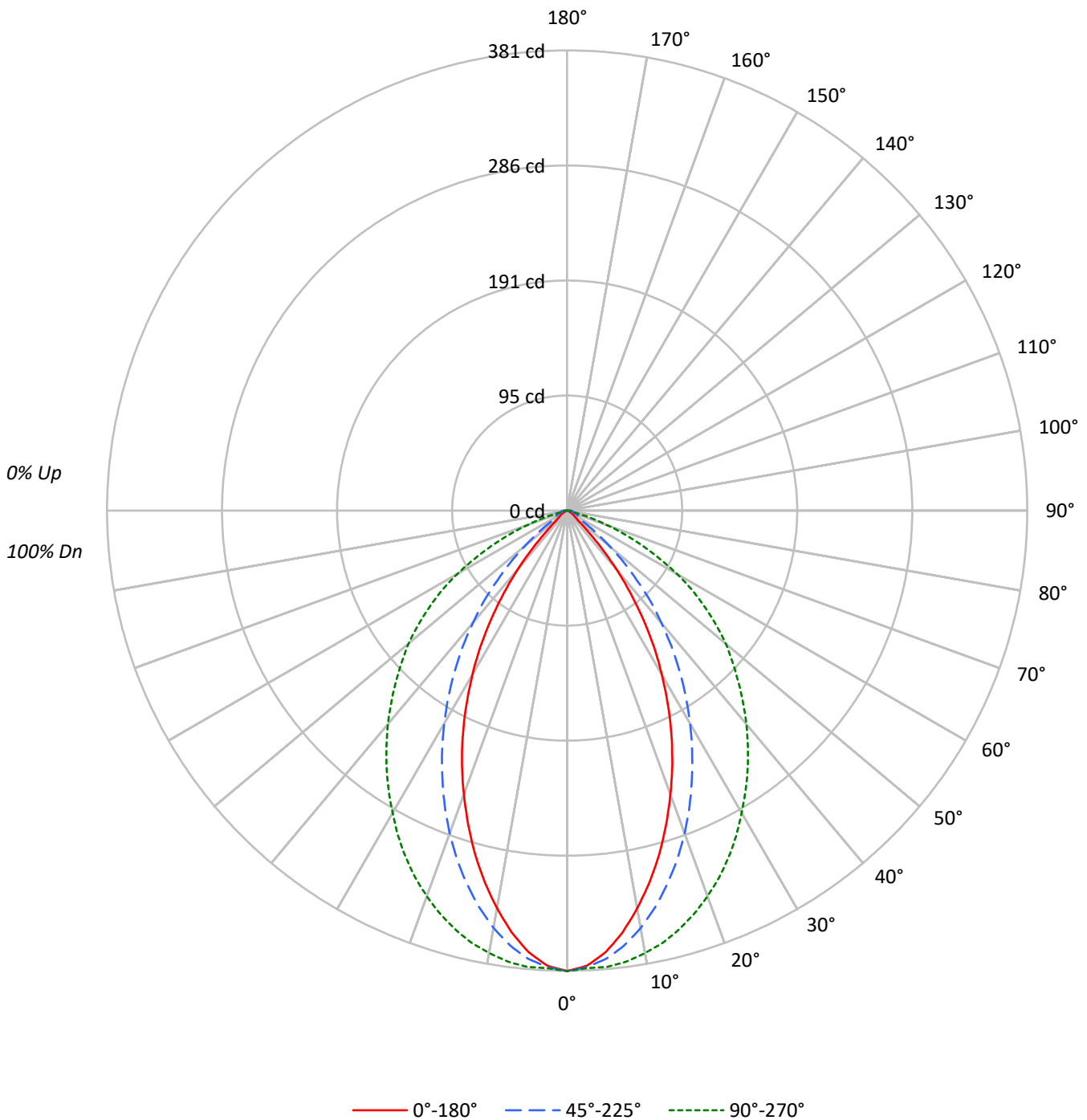
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 493.3 lumens  
Efficiency: N/A  
Efficacy: 39.5 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): 12.5  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

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

	0°	45°	90°
0°	2625	2625	2625
5°	2536	2574	2621
10°	2337	2453	2601
15°	2099	2283	2558
20°	1832	2083	2490
25°	1551	1857	2404
30°	1247	1617	2297
35°	922	1364	2190
40°	572	1089	2075
45°	223	797	1951
50°	104	499	1838
55°	77	214	1669
60°	52	151	1447
65°	34	158	1126
70°	34	145	709
75°	45	146	226
80°	67	167	151
85°	103	332	237

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1951 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.0	7.1
10°-20°	90.6	18.4
20°-30°	115.4	23.4
30°-40°	107.4	21.8
40°-50°	73.9	15.0
50°-60°	41.9	8.5
60°-70°	19.8	4.0
70°-80°	6.2	1.3
80°-90°	3.2	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°	241.0	48.8
0°-40°	348.4	70.6
0°-60°	464.2	94.1
0°-90°	493.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	493.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	381	381	381	381	381	
5°	367	372	372	376	379	34
15°	294	304	320	344	359	82
25°	204	217	244	286	316	93
35°	110	125	162	218	261	68
45°	23	36	82	148	200	22
55°	6	7	18	85	139	6
65°	2	2	10	30	69	2
75°	2	4	6	6	8	2
85°	1	3	4	4	3	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	381.3	381.3	381.3	381.3	381.3
2.5°	377.1	380.9	378.3	378.8	379.2
5°	366.9	372.0	372.4	375.8	379.2
7.5°	352.1	358.4	363.1	371.1	376.6
10°	334.3	341.9	350.8	363.9	372.0
12.5°	315.2	324.1	336.4	355.0	366.5
15°	294.4	304.2	320.3	344.4	358.8
17.5°	272.4	283.4	302.9	331.7	350.0
20°	250.0	261.8	284.3	317.3	339.8
22.5°	227.5	239.8	264.8	301.7	328.8
25°	204.2	217.3	244.5	285.6	316.5
27.5°	180.5	194.0	224.1	269.0	303.3
30°	156.8	171.2	203.4	252.1	288.9
32.5°	133.5	147.9	183.0	235.1	275.0
35°	109.7	125.0	162.3	217.8	260.6
37.5°	86.0	102.5	141.9	200.0	245.7
40°	63.6	79.2	121.2	182.6	230.9
42.5°	42.4	57.6	102.5	165.2	215.6
45°	22.9	36.4	81.8	147.9	200.4
47.5°	12.3	19.5	64.0	130.9	185.6
50°	9.7	11.0	46.6	115.2	171.6
52.5°	8.0	8.9	30.5	100.4	155.5
55°	6.4	7.2	17.8	85.2	139.0
57.5°	5.1	5.9	11.4	70.8	122.9
60°	3.8	4.7	11.0	56.8	105.1
62.5°	3.0	3.4	10.2	43.6	86.4
65°	2.1	2.5	9.7	30.5	69.1
67.5°	1.7	2.1	8.9	19.5	51.7
70°	1.7	1.7	7.2	12.7	35.2
72.5°	1.7	3.0	6.4	8.5	21.2
75°	1.7	3.8	5.5	5.9	8.5
77.5°	1.7	4.2	4.7	4.7	4.7
80°	1.7	3.8	4.2	4.2	3.8
82.5°	1.7	3.4	3.8	4.2	3.4
85°	1.3	3.4	4.2	3.8	3.0
87.5°	1.3	3.4	3.8	3.4	2.1
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	12.60	13.89	12.97	14.21	14.52
	3H	0.00	0.00	0.00	0.00	0.00	13.32	14.46	13.70	14.79	15.16
	4H	0.00	0.00	0.00	0.00	0.00	13.35	14.41	13.75	14.76	15.14
	6H	0.00	0.00	0.00	0.00	0.00	13.30	14.27	13.71	14.64	15.04
	8H	0.00	0.00	0.00	0.00	0.00	13.27	14.20	13.70	14.59	14.99
	12H	0.00	0.00	0.00	0.00	0.00	13.26	14.14	13.69	14.52	14.95
4H	2H	0.00	0.00	0.00	0.00	0.00	12.39	13.46	12.80	13.81	14.19
	3H	0.00	0.00	0.00	0.00	0.00	13.15	14.02	13.56	14.42	14.83
	4H	0.00	0.00	0.00	0.11	0.55	13.18	13.95	13.61	14.37	14.82
	6H	0.19	0.86	0.65	1.30	1.77	13.16	13.82	13.62	14.27	14.74
	8H	0.78	1.40	1.25	1.85	2.32	13.14	13.76	13.61	14.21	14.68
	12H	1.35	1.90	1.84	2.39	2.86	13.15	13.70	13.64	14.18	14.66
8H	4H	0.34	0.96	0.81	1.41	1.88	13.06	13.68	13.53	14.13	14.60
	6H	1.89	2.40	2.39	2.90	3.38	13.05	13.56	13.55	14.06	14.54
	8H	2.69	3.15	3.21	3.66	4.16	13.06	13.52	13.58	14.03	14.53
	12H	3.54	3.95	4.06	4.44	5.01	13.12	13.53	13.64	14.02	14.59
12H	4H	0.56	1.11	1.04	1.59	2.07	13.02	13.57	13.51	14.05	14.53
	6H	2.26	2.72	2.78	3.23	3.73	13.00	13.46	13.53	13.98	14.47
	8H	3.26	3.66	3.77	4.15	4.73	13.05	13.45	13.57	13.95	14.52