

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1062021

Luminaire Tested: S125RDR-H375D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062021  
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: S125RDR-H375D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

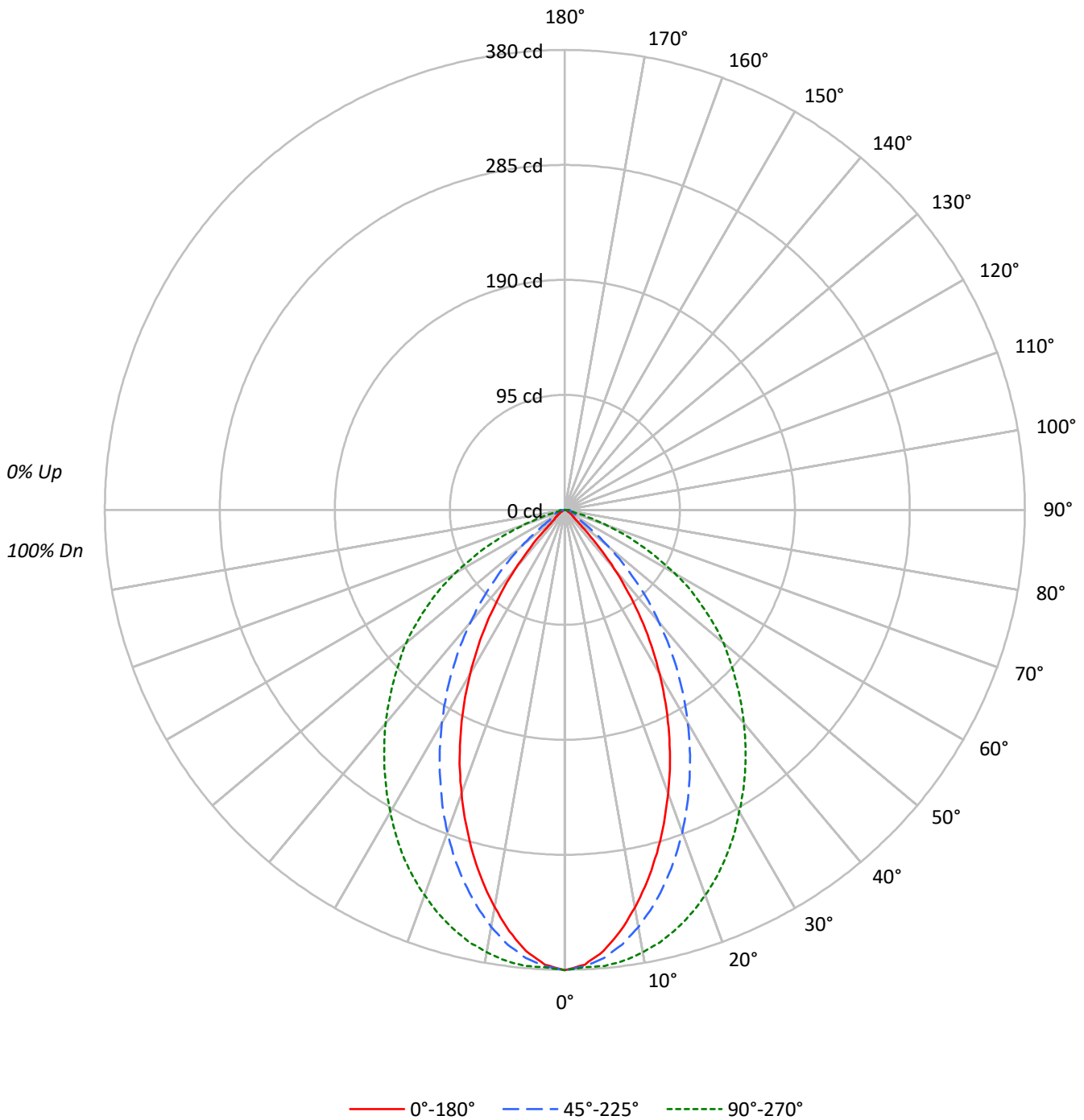
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 492.1 lumens  
Efficiency: N/A  
Efficacy: 42.1 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): 11.7  
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	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°	2619	2619	2619
5°	2530	2568	2615
10°	2332	2446	2595
15°	2094	2277	2552
20°	1827	2078	2483
25°	1548	1853	2398
30°	1243	1613	2291
35°	920	1361	2185
40°	570	1087	2070
45°	222	795	1946
50°	104	498	1834
55°	76	214	1664
60°	52	151	1443
65°	34	158	1123
70°	34	145	707
75°	45	146	226
80°	67	167	151
85°	103	332	237

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1946 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.9	7.1
10°-20°	90.4	18.4
20°-30°	115.1	23.4
30°-40°	107.2	21.8
40°-50°	73.7	15.0
50°-60°	41.8	8.5
60°-70°	19.7	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°	240.4	48.8
0°-40°	347.5	70.6
0°-60°	463.0	94.1
0°-90°	492.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	492.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	380	380	380	380	380	
5°	366	371	372	375	378	34
15°	294	303	320	344	358	82
25°	204	217	244	285	316	93
35°	110	125	162	217	260	68
45°	23	36	82	148	200	21
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°	380.4	380.4	380.4	380.4	380.4
2.5°	376.1	379.9	377.4	377.8	378.3
5°	366.0	371.1	371.5	374.9	378.3
7.5°	351.2	357.5	362.2	370.2	375.7
10°	333.5	341.1	349.9	363.0	371.1
12.5°	314.4	323.3	335.6	354.2	365.6
15°	293.7	303.4	319.5	343.6	358.0
17.5°	271.8	282.7	302.2	330.9	349.1
20°	249.4	261.2	283.6	316.6	338.9
22.5°	227.0	239.2	264.1	300.9	328.0
25°	203.7	216.8	243.9	284.9	315.7
27.5°	180.0	193.6	223.6	268.4	302.6
30°	156.4	170.7	202.9	251.5	288.2
32.5°	133.1	147.5	182.6	234.6	274.3
35°	109.5	124.7	161.9	217.2	259.9
37.5°	85.8	102.3	141.6	199.5	245.1
40°	63.4	79.0	120.9	182.2	230.3
42.5°	42.3	57.5	102.3	164.8	215.1
45°	22.8	36.3	81.6	147.5	199.9
47.5°	12.3	19.4	63.8	130.6	185.1
50°	9.7	11.0	46.5	115.0	171.2
52.5°	8.0	8.9	30.4	100.2	155.1
55°	6.3	7.2	17.8	84.9	138.6
57.5°	5.1	5.9	11.4	70.6	122.6
60°	3.8	4.6	11.0	56.6	104.8
62.5°	3.0	3.4	10.1	43.5	86.2
65°	2.1	2.5	9.7	30.4	68.9
67.5°	1.7	2.1	8.9	19.4	51.6
70°	1.7	1.7	7.2	12.7	35.1
72.5°	1.7	3.0	6.3	8.5	21.1
75°	1.7	3.8	5.5	5.9	8.5
77.5°	1.7	4.2	4.6	4.6	4.6
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	12.59	13.88	12.96	14.19	14.51
	3H	0.00	0.00	0.00	0.00	0.00	13.31	14.45	13.69	14.78	15.15
	4H	0.00	0.00	0.00	0.00	0.00	13.34	14.40	13.74	14.75	15.13
	6H	0.00	0.00	0.00	0.00	0.00	13.29	14.26	13.70	14.63	15.03
	8H	0.00	0.00	0.00	0.00	0.00	13.26	14.19	13.69	14.58	14.98
	12H	0.00	0.00	0.00	0.00	0.00	13.25	14.13	13.68	14.51	14.94
4H	2H	0.00	0.00	0.00	0.00	0.00	12.38	13.45	12.79	13.80	14.18
	3H	0.00	0.00	0.00	0.00	0.00	13.14	14.01	13.55	14.41	14.81
	4H	0.00	0.00	0.00	0.11	0.55	13.17	13.94	13.60	14.36	14.81
	6H	0.19	0.86	0.66	1.31	1.78	13.15	13.81	13.61	14.26	14.73
	8H	0.78	1.40	1.25	1.85	2.32	13.13	13.75	13.60	14.20	14.67
	12H	1.36	1.91	1.84	2.39	2.86	13.14	13.69	13.63	14.17	14.65
8H	4H	0.32	0.95	0.79	1.39	1.87	13.05	13.67	13.52	14.12	14.59
	6H	1.88	2.39	2.39	2.89	3.37	13.04	13.55	13.54	14.04	14.53
	8H	2.69	3.14	3.21	3.66	4.15	13.05	13.51	13.57	14.02	14.52
	12H	3.54	3.95	4.06	4.44	5.01	13.11	13.52	13.63	14.01	14.58
12H	4H	0.54	1.09	1.03	1.58	2.05	13.01	13.56	13.50	14.04	14.52
	6H	2.25	2.71	2.78	3.23	3.72	12.99	13.45	13.52	13.97	14.46
	8H	3.25	3.66	3.77	4.15	4.72	13.04	13.44	13.56	13.94	14.51