

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: P1062023

Luminaire Tested: S125RDR-H375D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062023  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H375D840-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

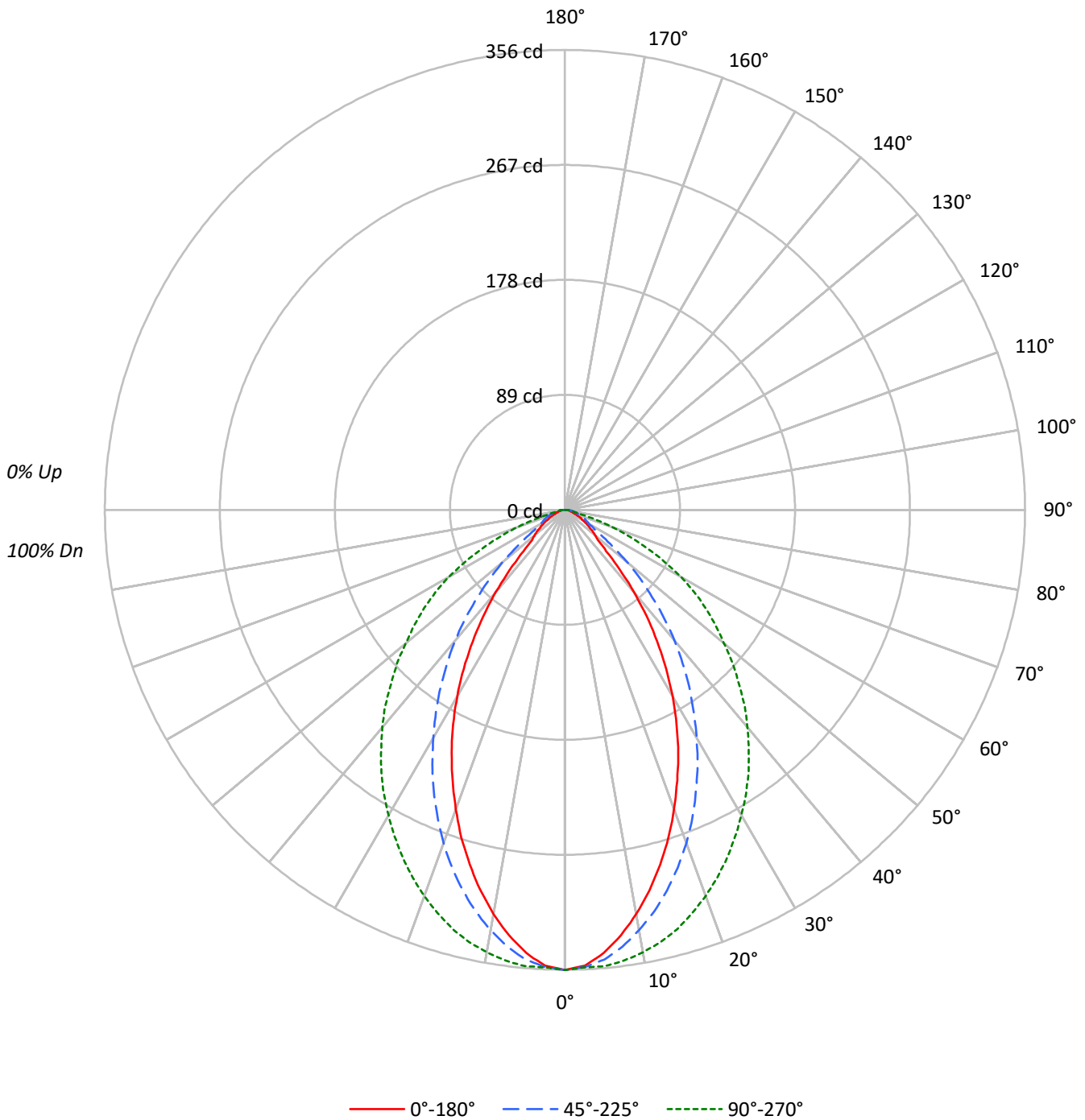
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 514.3 lumens  
Efficiency: N/A  
Efficacy: 44.0 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
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																		
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	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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																												
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70																												
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63																												
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56																												
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51																												
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																												
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42																												
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39																												
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36																												

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

	0°	45°	90°
0°	2453	2453	2453
5°	2380	2415	2450
10°	2221	2310	2431
15°	2027	2174	2394
20°	1808	2012	2331
25°	1576	1823	2256
30°	1324	1619	2170
35°	1044	1410	2081
40°	748	1185	1975
45°	440	930	1851
50°	326	669	1719
55°	274	406	1598
60°	222	296	1425
65°	173	282	1142
70°	145	264	773
75°	136	237	338
80°	135	234	218
85°	166	300	237

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1851 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.8	6.4
10°-20°	86.2	16.8
20°-30°	112.7	21.9
30°-40°	109.7	21.3
40°-50°	82.0	15.9
50°-60°	50.8	9.9
60°-70°	26.7	5.2
70°-80°	9.7	1.9
80°-90°	3.7	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°	231.7	45.1
0°-40°	341.4	66.4
0°-60°	474.2	92.2
0°-90°	514.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	514.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	356	356	356	356	356	
5°	344	349	349	352	354	32
15°	284	293	305	324	336	79
25°	207	218	240	272	297	95
35°	124	138	168	212	248	77
45°	45	59	96	149	190	38
55°	23	24	34	88	133	21
65°	11	11	17	37	70	11
75°	5	6	9	10	13	6
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	356.2	356.2	356.2	356.2	356.2
2.5°	353.2	356.2	354.1	354.1	354.5
5°	344.3	349.0	349.4	351.5	354.5
7.5°	332.1	337.6	341.0	347.3	351.9
10°	317.7	324.1	330.4	341.0	347.7
12.5°	301.7	309.3	318.6	332.9	342.6
15°	284.3	292.8	305.0	323.6	335.9
17.5°	266.2	275.0	290.3	312.6	327.4
20°	246.7	256.5	274.6	300.0	318.1
22.5°	226.9	237.9	257.7	286.5	308.0
25°	207.4	218.0	240.0	272.5	297.0
27.5°	187.2	198.2	222.2	258.1	285.2
30°	166.5	178.3	203.6	243.4	272.9
32.5°	145.8	158.0	185.5	228.1	260.7
35°	124.2	137.7	167.7	212.5	247.6
37.5°	103.9	118.3	149.6	196.5	233.6
40°	83.2	98.0	131.8	180.8	219.7
42.5°	63.0	78.2	113.7	164.8	205.8
45°	45.2	59.1	95.5	149.1	190.1
47.5°	34.6	42.7	78.6	133.1	176.2
50°	30.4	33.0	62.5	117.5	160.5
52.5°	26.6	28.3	46.5	102.2	147.0
55°	22.8	24.1	33.8	87.9	133.1
57.5°	19.4	20.7	25.8	74.8	118.7
60°	16.1	17.3	21.5	61.7	103.5
62.5°	13.5	13.9	19.4	49.4	86.6
65°	10.6	11.4	17.3	37.2	70.1
67.5°	8.9	9.3	15.2	26.6	54.1
70°	7.2	7.6	13.1	18.6	38.4
72.5°	6.3	6.3	11.0	13.5	24.5
75°	5.1	5.9	8.9	9.7	12.7
77.5°	4.2	5.9	7.6	7.2	6.8
80°	3.4	5.5	5.9	5.9	5.5
82.5°	3.0	4.6	5.1	4.6	4.2
85°	2.1	3.8	3.8	3.8	3.0
87.5°	1.7	3.4	3.0	3.0	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	2.90	4.25	3.27	4.56	4.88	12.61	13.96	12.97	14.27	14.59
	3H	3.74	4.94	4.12	5.27	5.63	13.52	14.72	13.90	15.05	15.41
	4H	4.10	5.22	4.50	5.57	5.95	13.62	14.74	14.02	15.09	15.47
	6H	4.47	5.50	4.89	5.87	6.26	13.60	14.63	14.02	15.00	15.39
	8H	4.66	5.63	5.09	6.02	6.43	13.59	14.56	14.02	14.96	15.36
	12H	4.82	5.75	5.25	6.13	6.56	13.58	14.51	14.01	14.89	15.32
4H	2H	3.73	4.84	4.13	5.20	5.58	12.46	13.58	12.86	13.93	14.31
	3H	4.79	5.70	5.20	6.11	6.51	13.45	14.36	13.86	14.77	15.17
	4H	5.24	6.06	5.68	6.48	6.92	13.58	14.39	14.01	14.81	15.26
	6H	5.80	6.51	6.26	6.95	7.42	13.61	14.32	14.07	14.76	15.23
	8H	6.06	6.72	6.53	7.17	7.64	13.61	14.27	14.08	14.72	15.19
	12H	6.30	6.89	6.79	7.37	7.84	13.62	14.20	14.10	14.68	15.16
8H	4H	5.80	6.46	6.27	6.90	7.37	13.50	14.16	13.97	14.61	15.08
	6H	6.58	7.11	7.08	7.61	8.09	13.56	14.10	14.06	14.60	15.08
	8H	6.99	7.48	7.51	7.99	8.48	13.59	14.07	14.11	14.59	15.08
	12H	7.41	7.83	7.92	8.33	8.90	13.64	14.07	14.16	14.57	15.14
12H	4H	5.86	6.44	6.34	6.92	7.40	13.47	14.05	13.95	14.53	15.01
	6H	6.72	7.20	7.24	7.72	8.21	13.53	14.01	14.05	14.53	15.02
	8H	7.25	7.67	7.76	8.17	8.74	13.59	14.02	14.11	14.51	15.08