

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: P1062067

Luminaire Tested: S125RDR-H375D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062067  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H375D940-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

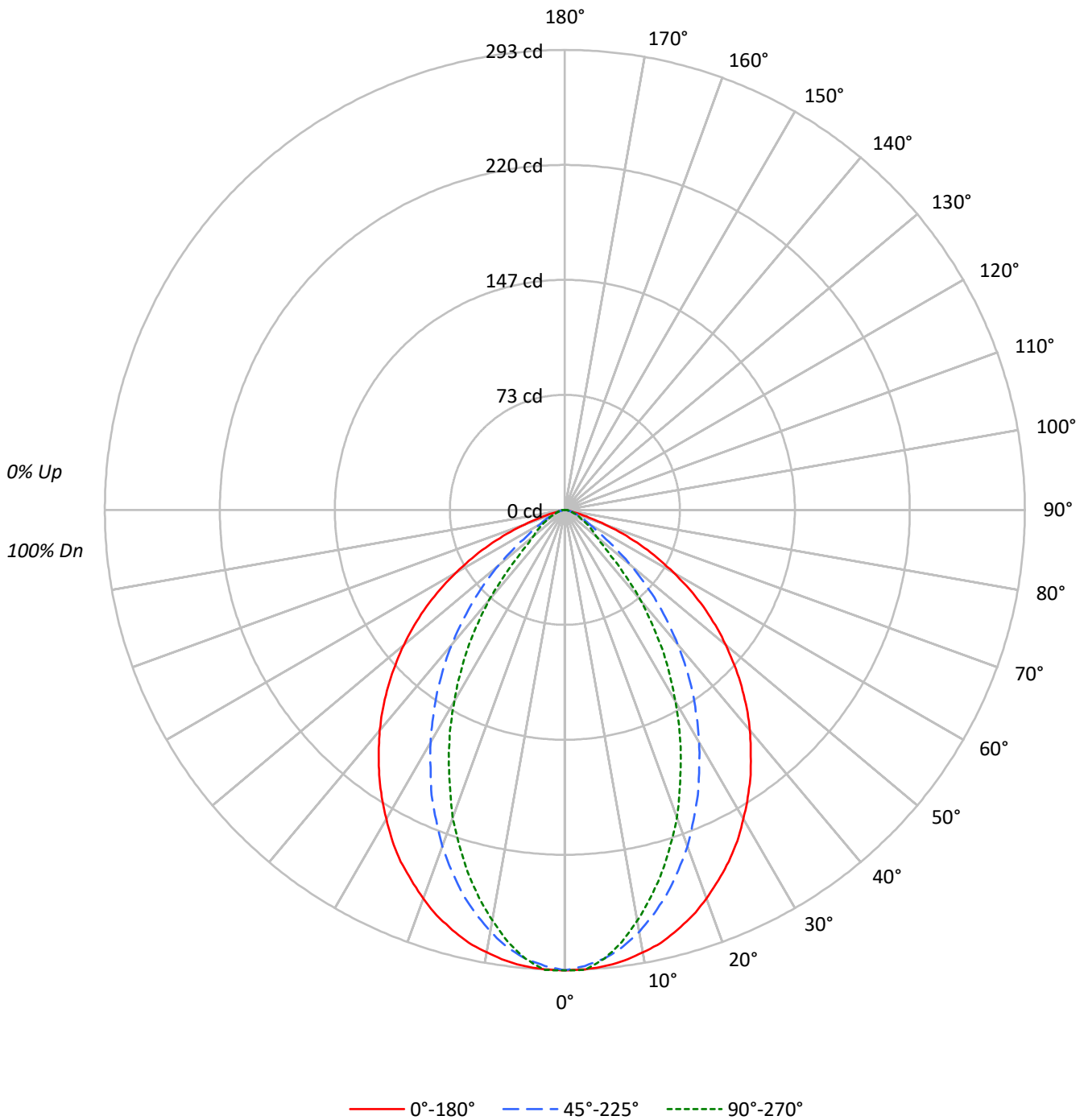
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 424.3 lumens  
Efficiency: N/A  
Efficacy: 36.3 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	2020	2020	2020
5°	2017	1984	1984
10°	2002	1908	1858
15°	1974	1802	1704
20°	1931	1672	1530
25°	1878	1524	1328
30°	1808	1360	1120
35°	1733	1191	909
40°	1648	1005	673
45°	1550	806	407
50°	1433	591	280
55°	1293	363	233
60°	1099	246	185
65°	868	189	145
70°	548	135	121
75°	178	98	98
80°	59	75	87
85°	32	55	55

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1550 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.1	6.4
10°-20°	71.7	16.9
20°-30°	94.3	22.2
30°-40°	92.6	21.8
40°-50°	70.1	16.5
50°-60°	42.5	10.0
60°-70°	20.1	4.7
70°-80°	5.2	1.2
80°-90°	0.8	0.2
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°	193.1	45.5
0°-40°	285.7	67.3
0°-60°	398.3	93.9
0°-90°	424.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	424.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	293	293	293	293	293	
5°	292	291	287	287	287	28
15°	277	270	253	243	239	78
25°	247	228	201	182	175	114
35°	206	179	142	117	108	129
45°	159	125	83	53	42	123
55°	108	74	30	20	19	96
65°	53	27	12	10	9	53
75°	7	4	4	4	4	10
85°	0	0	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	293.4	293.4	293.4	293.4	293.4
2.5°	293.0	293.0	290.8	293.4	293.4
5°	291.9	291.2	287.1	287.4	287.1
7.5°	289.7	288.2	281.1	279.2	277.7
10°	286.3	283.3	272.9	268.4	265.8
12.5°	282.6	277.4	263.2	256.9	252.8
15°	277.0	269.5	252.8	243.1	239.0
17.5°	271.0	260.2	240.5	228.9	223.7
20°	263.6	250.9	228.2	214.0	208.8
22.5°	255.4	240.5	214.0	198.3	191.3
25°	247.2	228.5	200.6	181.9	174.8
27.5°	237.9	216.6	185.3	165.9	158.1
30°	227.4	204.7	171.1	151.0	140.9
32.5°	217.0	192.4	156.2	134.2	124.1
35°	206.2	178.6	141.7	116.7	108.1
37.5°	194.6	165.5	126.8	100.7	90.6
40°	183.4	152.5	111.8	84.3	74.9
42.5°	171.5	139.4	96.9	68.2	57.8
45°	159.2	125.3	82.8	52.6	41.8
47.5°	146.5	112.6	68.6	38.8	31.3
50°	133.8	99.2	55.2	28.7	26.1
52.5°	120.8	86.1	41.8	23.9	22.7
55°	107.7	73.8	30.2	20.5	19.4
57.5°	94.3	60.4	22.7	17.5	16.4
60°	79.8	48.5	17.9	14.5	13.4
62.5°	66.4	38.0	14.5	11.9	11.2
65°	53.3	27.2	11.6	9.7	8.9
67.5°	39.9	18.3	8.9	7.5	7.5
70°	27.2	11.9	6.7	6.0	6.0
72.5°	16.4	7.1	4.8	4.8	4.8
75°	6.7	4.5	3.7	3.7	3.7
77.5°	2.2	2.6	2.6	3.0	3.0
80°	1.5	1.5	1.9	2.2	2.2
82.5°	0.7	1.1	1.1	1.5	1.5
85°	0.4	0.4	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	0.4	0.4
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	11.77	13.10	12.14	13.42	13.73	2.42	3.75	2.79	4.06	4.38
	3H	12.48	13.66	12.86	13.99	14.35	3.21	4.39	3.59	4.72	5.08
	4H	12.50	13.59	12.90	13.94	14.32	3.46	4.55	3.86	4.90	5.29
	6H	12.43	13.43	12.84	13.80	14.20	3.63	4.64	4.05	5.01	5.40
	8H	12.38	13.34	12.81	13.73	14.13	3.68	4.63	4.11	5.02	5.43
	12H	12.34	13.25	12.78	13.64	14.07	3.68	4.59	4.12	4.98	5.41
4H	2H	11.60	12.70	12.01	13.05	13.43	2.91	4.01	3.31	4.36	4.74
	3H	12.35	13.24	12.76	13.65	14.05	3.83	4.72	4.24	5.12	5.53
	4H	12.37	13.16	12.80	13.58	14.03	4.13	4.93	4.57	5.35	5.79
	6H	12.31	12.99	12.77	13.44	13.90	4.39	5.08	4.86	5.52	5.99
	8H	12.26	12.89	12.72	13.34	13.81	4.46	5.10	4.93	5.54	6.01
	12H	12.21	12.77	12.70	13.26	13.73	4.48	5.04	4.97	5.52	6.00
8H	4H	12.25	12.89	12.72	13.34	13.81	4.25	4.88	4.71	5.33	5.80
	6H	12.18	12.69	12.68	13.19	13.67	4.56	5.08	5.06	5.58	6.06
	8H	12.12	12.59	12.64	13.10	13.59	4.67	5.13	5.19	5.65	6.14
	12H	12.08	12.49	12.60	12.99	13.56	4.72	5.13	5.24	5.63	6.20
12H	4H	12.21	12.77	12.69	13.25	13.73	4.22	4.78	4.70	5.26	5.74
	6H	12.12	12.58	12.64	13.10	13.59	4.53	5.00	5.05	5.51	6.01
	8H	12.08	12.49	12.60	12.99	13.56	4.67	5.08	5.19	5.58	6.15