

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: P1062052

Luminaire Tested: S125RDR-H375D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062052  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H375D930-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

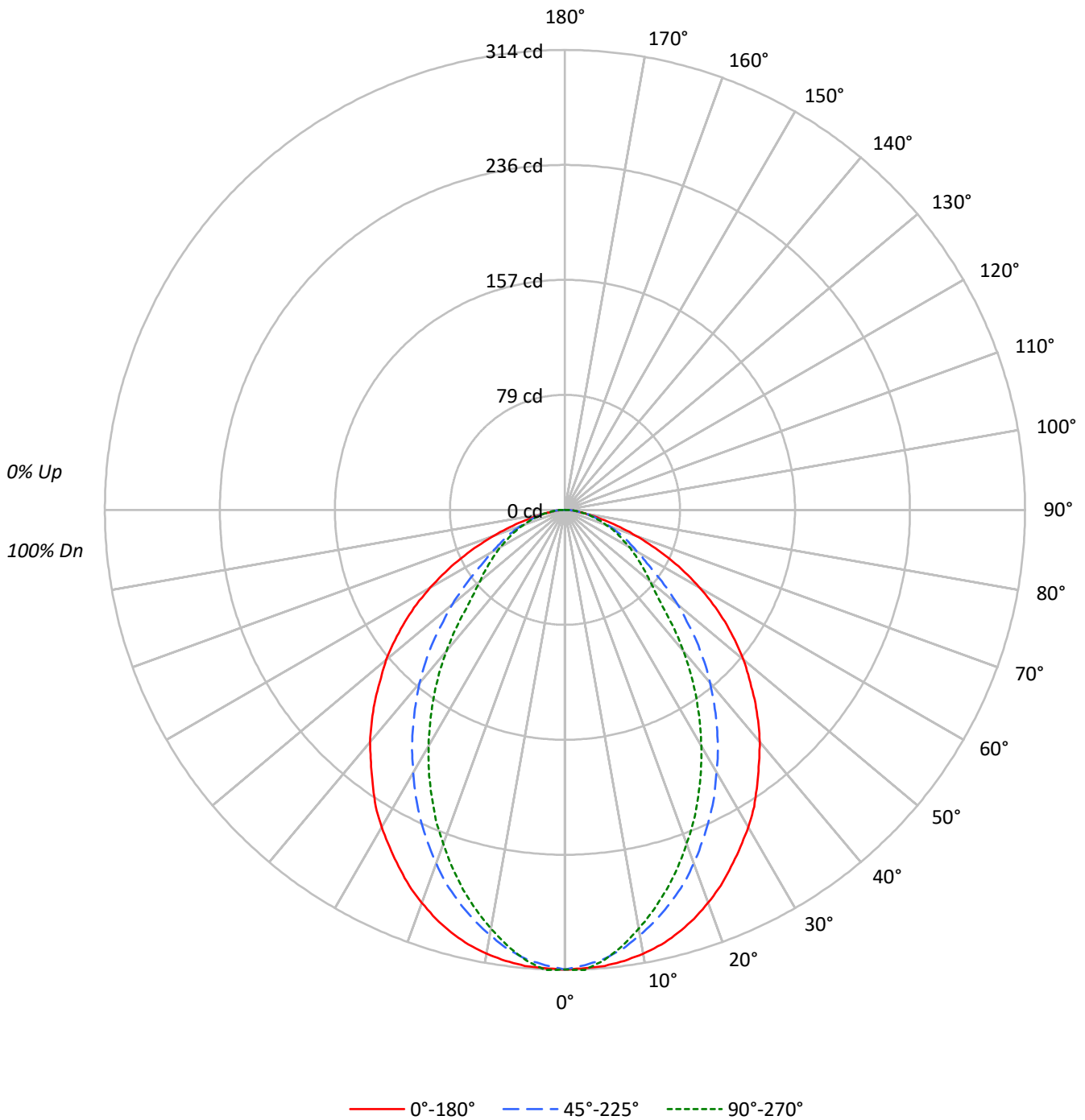
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 594.7 lumens  
Efficiency: N/A  
Efficacy: 50.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
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									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													100															
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87													87															
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75													75															
3	93	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65													65															
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57													57															
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50													50															
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45													45															
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40													40															
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36													36															
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33													33															
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30													30															

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

	0°	45°	90°
0°	2161	2161	2161
5°	2161	2127	2132
10°	2152	2061	2030
15°	2131	1980	1912
20°	2093	1883	1778
25°	2041	1771	1636
30°	1989	1645	1480
35°	1922	1519	1312
40°	1860	1385	1131
45°	1782	1238	926
50°	1705	1073	811
55°	1600	896	749
60°	1460	784	700
65°	1277	717	650
70°	1037	644	604
75°	745	591	561
80°	515	527	527
85°	379	458	482

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1782 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.2	4.9
10°-20°	78.9	13.3
20°-30°	109.1	18.3
30°-40°	116.2	19.5
40°-50°	102.1	17.2
50°-60°	77.4	13.0
60°-70°	50.3	8.5
70°-80°	24.9	4.2
80°-90°	6.5	1.1
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°	217.3	36.5
0°-40°	333.5	56.1
0°-60°	513.0	86.3
0°-90°	594.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	594.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	314	314	314	314	314	
5°	313	312	308	309	308	30
15°	299	292	278	271	268	84
25°	269	254	233	221	215	124
35°	229	208	181	164	156	143
45°	183	158	127	104	95	141
55°	133	107	75	64	62	119
65°	78	58	44	41	40	77
75°	28	24	22	22	21	31
85°	5	6	6	6	6	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	313.9	313.9	313.9	313.9	313.9
2.5°	313.2	313.9	311.2	313.6	314.3
5°	312.6	311.9	307.8	308.8	308.5
7.5°	310.5	309.2	302.3	301.7	300.3
10°	307.8	304.4	294.8	292.5	290.4
12.5°	304.0	298.6	287.0	282.2	279.8
15°	298.9	292.1	277.8	271.3	268.3
17.5°	292.8	283.3	268.3	259.4	256.0
20°	285.6	274.4	257.0	246.8	242.7
22.5°	277.8	264.5	245.1	234.2	229.7
25°	268.6	253.9	233.1	221.2	215.4
27.5°	259.4	243.0	220.5	207.2	201.1
30°	250.2	231.4	206.9	192.6	186.1
32.5°	240.3	219.5	194.3	178.6	171.1
35°	228.7	207.6	180.7	164.3	156.1
37.5°	217.5	195.0	167.4	149.0	141.1
40°	206.9	183.0	154.1	134.0	125.8
42.5°	195.0	170.4	140.8	119.6	110.4
45°	183.0	157.5	127.1	104.3	95.1
47.5°	170.4	145.2	112.8	90.3	84.2
50°	159.2	132.6	100.2	79.8	75.7
52.5°	146.2	120.3	87.3	71.6	68.9
55°	133.3	107.0	74.6	64.4	62.4
57.5°	120.0	95.1	64.8	58.3	56.2
60°	106.0	82.8	56.9	51.8	50.8
62.5°	92.0	70.2	50.1	46.4	45.0
65°	78.4	58.3	44.0	40.6	39.9
67.5°	64.4	47.4	37.8	35.4	35.1
70°	51.5	38.5	32.0	30.7	30.0
72.5°	39.5	30.7	26.9	25.9	25.6
75°	28.0	24.5	22.2	21.5	21.1
77.5°	18.7	18.7	17.7	17.0	17.4
80°	13.0	13.6	13.3	13.3	13.3
82.5°	8.5	9.2	9.5	9.5	9.5
85°	4.8	5.5	5.8	5.8	6.1
87.5°	1.7	2.0	2.4	2.7	2.7
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	13.23	14.72	13.60	15.04	15.35	9.47	10.97	9.84	11.28	11.59
	3H	14.54	15.88	14.92	16.21	16.57	11.06	12.39	11.43	12.72	13.08
	4H	14.91	16.17	15.31	16.51	16.89	11.66	12.91	12.06	13.26	13.64
	6H	15.09	16.24	15.50	16.61	17.00	12.13	13.29	12.54	13.65	14.05
	8H	15.12	16.22	15.55	16.61	17.02	12.29	13.39	12.72	13.78	14.18
	12H	15.14	16.19	15.57	16.57	17.00	12.40	13.45	12.83	13.83	14.26
4H	2H	13.34	14.60	13.74	14.95	15.32	10.14	11.39	10.54	11.74	12.12
	3H	14.83	15.87	15.24	16.27	16.67	11.92	12.95	12.33	13.35	13.76
	4H	15.31	16.24	15.74	16.65	17.09	12.63	13.57	13.07	13.98	14.42
	6H	15.59	16.40	16.05	16.84	17.30	13.22	14.03	13.68	14.48	14.94
	8H	15.66	16.42	16.12	16.86	17.33	13.43	14.18	13.89	14.63	15.10
	12H	15.70	16.38	16.18	16.85	17.33	13.58	14.26	14.06	14.73	15.21
8H	4H	15.39	16.15	15.85	16.59	17.06	12.94	13.70	13.41	14.15	14.61
	6H	15.75	16.38	16.25	16.87	17.35	13.65	14.28	14.15	14.77	15.25
	8H	15.87	16.43	16.38	16.94	17.43	13.93	14.49	14.44	15.00	15.49
	12H	15.95	16.45	16.46	16.94	17.51	14.16	14.65	14.67	15.14	15.71
12H	4H	15.38	16.06	15.87	16.54	17.01	12.97	13.65	13.45	14.13	14.60
	6H	15.75	16.31	16.27	16.83	17.31	13.70	14.26	14.22	14.77	15.26
	8H	15.91	16.41	16.42	16.90	17.47	14.04	14.53	14.55	15.02	15.59