

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: P1062006

Luminaire Tested: S125RDR-H375D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062006
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H375D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

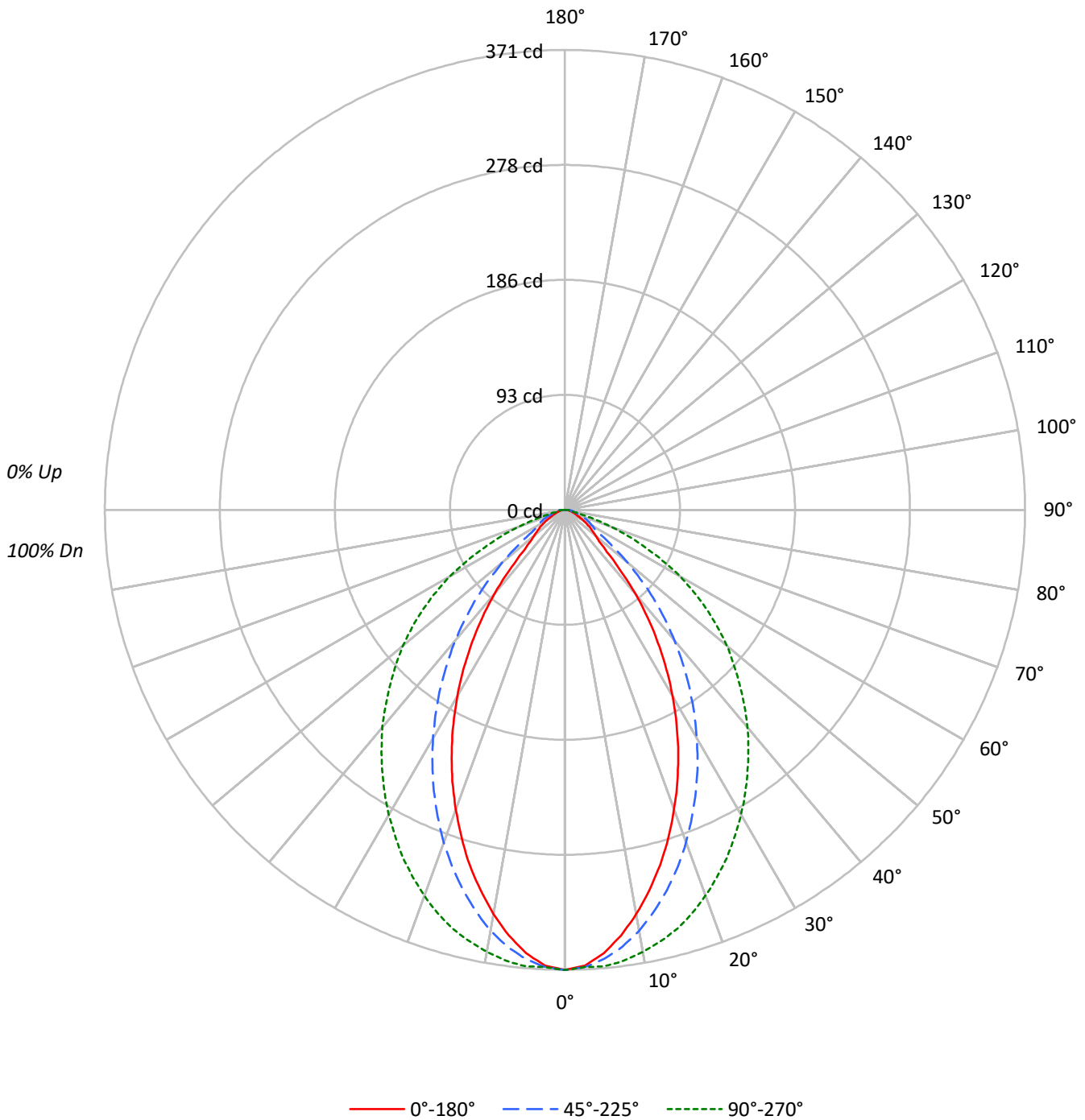
Lumens per Lamp: N/A
Luminaire Lumens: 537.6 lumens
Efficiency: N/A
Efficacy: 45.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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					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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	83	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2555	2555	2555
5°	2481	2513	2555
10°	2316	2410	2532
15°	2114	2263	2493
20°	1884	2092	2427
25°	1642	1899	2349
30°	1379	1690	2258
35°	1097	1468	2158
40°	791	1234	2059
45°	468	980	1940
50°	346	697	1825
55°	294	431	1671
60°	240	347	1472
65°	186	321	1163
70°	159	278	779
75°	146	242	314
80°	155	250	218
85°	190	371	253

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1940 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.2	6.4
10°-20°	89.8	16.7
20°-30°	117.4	21.8
30°-40°	114.4	21.3
40°-50°	85.8	16.0
50°-60°	53.8	10.0
60°-70°	28.0	5.2
70°-80°	10.1	1.9
80°-90°	4.0	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°	241.5	44.9
0°-40°	355.8	66.2
0°-60°	495.4	92.2
0°-90°	537.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	537.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	371	371	371	371	371	
5°	359	364	364	366	370	33
15°	297	305	318	337	350	83
25°	216	228	250	284	309	99
35°	130	144	175	221	257	81
45°	48	62	101	155	199	40
55°	24	26	36	94	139	22
65°	11	12	20	38	71	12
75°	6	8	9	10	12	6
85°	2	4	5	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	371.1	371.1	371.1	371.1	371.1
2.5°	368.0	371.5	369.2	369.2	369.2
5°	358.9	363.6	363.6	366.4	369.6
7.5°	346.3	351.8	355.4	362.1	366.8
10°	331.3	338.0	344.7	355.7	362.1
12.5°	314.3	322.2	331.7	347.1	356.5
15°	296.6	305.3	317.5	337.2	349.8
17.5°	277.3	287.5	302.1	325.8	341.2
20°	257.1	267.4	285.5	312.4	331.3
22.5°	237.0	248.1	267.8	298.2	320.6
25°	216.1	228.0	250.0	284.0	309.2
27.5°	194.8	207.1	231.5	269.4	296.6
30°	173.5	186.2	212.6	253.6	284.0
32.5°	152.2	165.6	193.6	237.4	270.6
35°	130.5	144.3	174.7	221.3	256.8
37.5°	109.6	123.4	155.8	204.7	242.9
40°	88.0	102.9	137.3	188.1	229.1
42.5°	66.7	82.0	118.7	171.6	214.2
45°	48.1	62.3	100.6	155.4	199.2
47.5°	37.1	45.0	82.0	138.8	184.6
50°	32.3	34.7	65.1	123.4	170.4
52.5°	28.0	29.6	48.9	109.2	155.0
55°	24.5	25.6	35.9	93.9	139.2
57.5°	20.5	22.1	28.4	78.9	123.1
60°	17.4	18.1	25.2	65.1	106.9
62.5°	14.2	15.0	22.5	51.3	88.7
65°	11.4	12.2	19.7	37.9	71.4
67.5°	9.5	9.9	16.6	26.8	54.8
70°	7.9	8.3	13.8	18.5	38.7
72.5°	6.7	7.9	11.0	13.4	24.5
75°	5.5	7.5	9.1	9.5	11.8
77.5°	4.7	7.1	7.5	7.5	6.7
80°	3.9	5.9	6.3	5.9	5.5
82.5°	3.2	4.7	5.1	5.1	4.3
85°	2.4	3.9	4.7	4.3	3.2
87.5°	1.6	3.5	3.9	3.5	2.4
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	3.18	4.53	3.55	4.84	5.16	12.79	14.14	13.16	14.46	14.77
	3H	4.04	5.24	4.42	5.57	5.94	13.63	14.83	14.01	15.16	15.53
	4H	4.46	5.58	4.87	5.93	6.32	13.71	14.83	14.11	15.18	15.56
	6H	4.89	5.91	5.30	6.28	6.68	13.69	14.72	14.10	15.09	15.48
	8H	5.07	6.04	5.50	6.43	6.84	13.68	14.65	14.11	15.04	15.45
	12H	5.23	6.16	5.66	6.55	6.98	13.66	14.60	14.10	14.98	15.41
4H	2H	4.14	5.26	4.54	5.61	5.99	12.66	13.77	13.06	14.13	14.51
	3H	5.20	6.11	5.61	6.52	6.92	13.56	14.48	13.98	14.88	15.29
	4H	5.76	6.58	6.19	7.00	7.44	13.67	14.49	14.10	14.91	15.35
	6H	6.35	7.06	6.81	7.51	7.97	13.69	14.40	14.16	14.85	15.31
	8H	6.59	7.25	7.06	7.70	8.17	13.69	14.36	14.16	14.80	15.27
	12H	6.82	7.41	7.31	7.89	8.36	13.71	14.29	14.19	14.77	15.25
8H	4H	6.23	6.89	6.70	7.34	7.81	13.59	14.25	14.06	14.70	15.17
	6H	7.04	7.58	7.54	8.07	8.55	13.65	14.19	14.15	14.68	15.16
	8H	7.41	7.90	7.94	8.42	8.91	13.68	14.16	14.20	14.68	15.17
	12H	7.81	8.24	8.32	8.73	9.30	13.74	14.17	14.26	14.67	15.24
12H	4H	6.28	6.87	6.77	7.35	7.82	13.56	14.14	14.04	14.63	15.10
	6H	7.16	7.64	7.68	8.16	8.65	13.61	14.10	14.13	14.61	15.10
	8H	7.64	8.07	8.16	8.57	9.14	13.68	14.11	14.20	14.61	15.18