

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: P1062024

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062024
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-H375D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

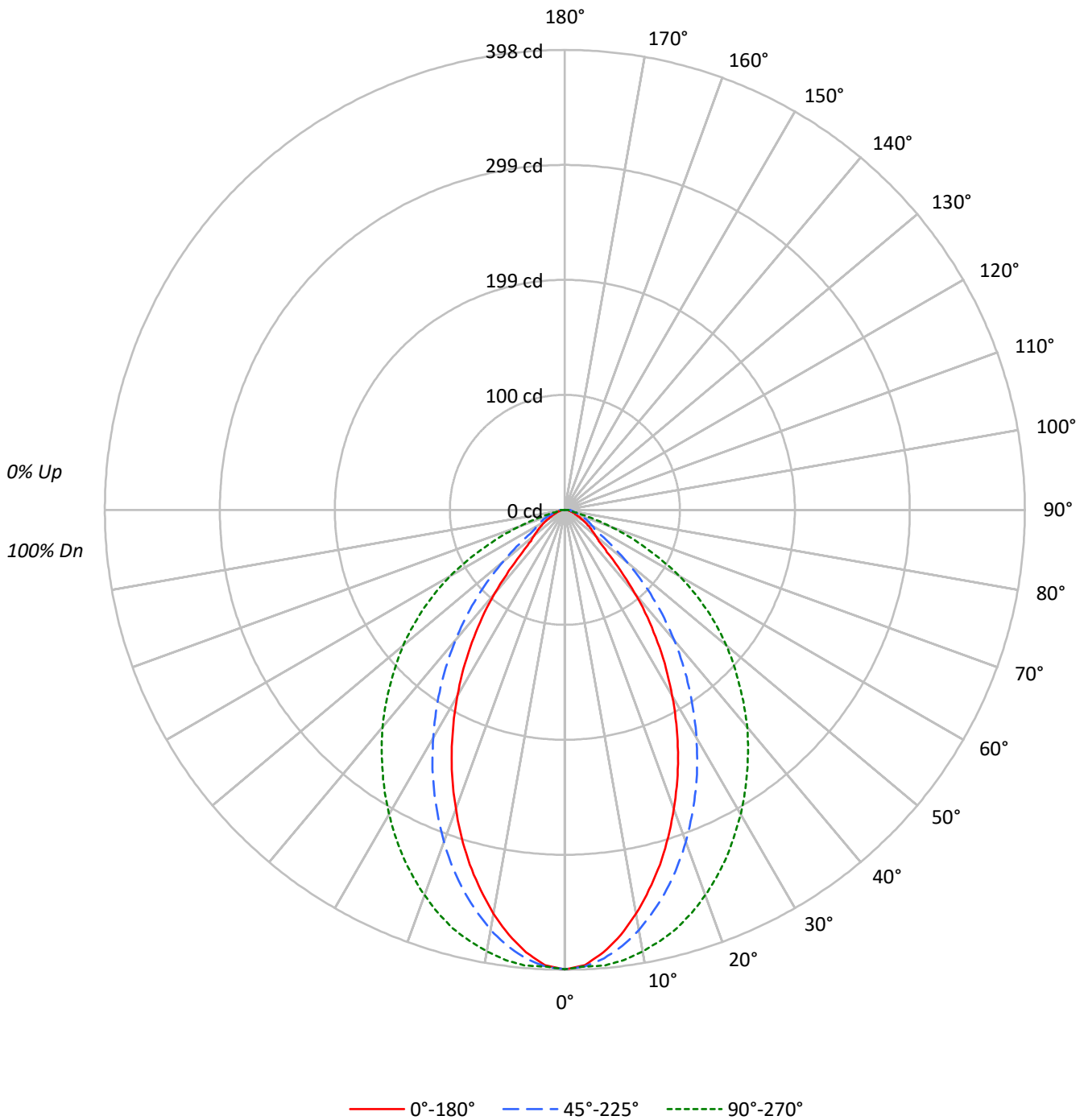
Lumens per Lamp: N/A
Luminaire Lumens: 576.0 lumens
Efficiency: N/A
Efficacy: 49.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	82	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°	2738	2738	2738
5°	2657	2693	2736
10°	2482	2582	2712
15°	2265	2425	2672
20°	2019	2241	2601
25°	1759	2035	2517
30°	1478	1811	2419
35°	1176	1573	2312
40°	847	1322	2207
45°	502	1050	2078
50°	372	747	1955
55°	315	462	1791
60°	256	372	1577
65°	200	344	1246
70°	171	298	833
75°	157	258	338
80°	167	270	234
85°	197	403	269

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2078 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	6.4
10°-20°	96.3	16.7
20°-30°	125.8	21.8
30°-40°	122.6	21.3
40°-50°	91.9	16.0
50°-60°	57.6	10.0
60°-70°	30.0	5.2
70°-80°	10.9	1.9
80°-90°	4.3	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°	258.7	44.9
0°-40°	381.3	66.2
0°-60°	530.8	92.2
0°-90°	576.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	576.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	384	390	390	393	396	36
15°	318	327	340	361	375	89
25°	232	244	268	304	331	106
35°	140	155	187	237	275	87
45°	52	67	108	166	213	43
55°	26	28	38	101	149	23
65°	12	13	21	41	76	13
75°	6	8	10	10	13	6
85°	2	4	5	5	3	3
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	397.6	397.6	397.6	397.6	397.6
2.5°	394.3	398.1	395.5	395.5	395.5
5°	384.5	389.6	389.6	392.6	395.9
7.5°	371.0	376.9	380.7	387.9	393.0
10°	355.0	362.1	369.3	381.2	387.9
12.5°	336.8	345.2	355.4	371.9	382.0
15°	317.8	327.1	340.2	361.3	374.8
17.5°	297.1	308.1	323.7	349.0	365.5
20°	275.5	286.5	305.9	334.7	355.0
22.5°	254.0	265.8	286.9	319.5	343.5
25°	231.6	244.2	267.9	304.2	331.3
27.5°	208.7	221.8	248.0	288.6	317.8
30°	185.9	199.5	227.8	271.7	304.2
32.5°	163.1	177.5	207.5	254.4	289.9
35°	139.9	154.7	187.2	237.1	275.1
37.5°	117.5	132.3	166.9	219.3	260.3
40°	94.2	110.3	147.1	201.6	245.5
42.5°	71.4	87.9	127.2	183.8	229.5
45°	51.6	66.8	107.8	166.5	213.4
47.5°	39.7	48.2	87.9	148.7	197.8
50°	34.7	37.2	69.7	132.3	182.5
52.5°	30.0	31.7	52.4	117.1	166.1
55°	26.2	27.5	38.5	100.6	149.2
57.5°	22.0	23.7	30.4	84.5	131.8
60°	18.6	19.4	27.0	69.7	114.5
62.5°	15.2	16.1	24.1	54.9	95.1
65°	12.3	13.1	21.1	40.6	76.5
67.5°	10.1	10.6	17.7	28.7	58.7
70°	8.5	8.9	14.8	19.9	41.4
72.5°	7.2	8.5	11.8	14.4	26.2
75°	5.9	8.0	9.7	10.1	12.7
77.5°	5.1	7.6	8.0	8.0	7.2
80°	4.2	6.3	6.8	6.3	5.9
82.5°	3.4	5.1	5.5	5.5	4.6
85°	2.5	4.2	5.1	4.6	3.4
87.5°	1.7	3.8	4.2	3.8	2.5
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	3.43	4.78	3.79	5.09	5.41	13.03	14.38	13.39	14.69	15.01
	3H	4.28	5.48	4.66	5.81	6.18	13.87	15.07	14.25	15.40	15.76
	4H	4.71	5.82	5.11	6.18	6.56	13.94	15.06	14.35	15.41	15.80
	6H	5.13	6.16	5.55	6.53	6.93	13.93	14.95	14.34	15.32	15.72
	8H	5.31	6.29	5.74	6.68	7.08	13.91	14.89	14.34	15.28	15.68
	12H	5.47	6.40	5.90	6.79	7.22	13.90	14.83	14.33	15.22	15.65
4H	2H	4.38	5.50	4.79	5.85	6.24	12.89	14.01	13.29	14.36	14.74
	3H	5.44	6.36	5.85	6.76	7.16	13.80	14.72	14.21	15.12	15.52
	4H	6.00	6.82	6.43	7.24	7.68	13.90	14.72	14.34	15.14	15.58
	6H	6.59	7.30	7.06	7.75	8.21	13.93	14.64	14.39	15.08	15.55
	8H	6.83	7.50	7.30	7.94	8.41	13.93	14.59	14.40	15.04	15.51
	12H	7.06	7.64	7.54	8.13	8.60	13.94	14.53	14.43	15.01	15.48
8H	4H	6.47	7.13	6.94	7.57	8.04	13.83	14.49	14.30	14.94	15.41
	6H	7.28	7.82	7.78	8.31	8.79	13.88	14.42	14.38	14.92	15.40
	8H	7.66	8.15	8.18	8.66	9.15	13.91	14.40	14.43	14.91	15.41
	12H	8.05	8.48	8.56	8.97	9.54	13.98	14.41	14.49	14.90	15.47
12H	4H	6.52	7.10	7.00	7.59	8.06	13.79	14.38	14.28	14.86	15.34
	6H	7.40	7.89	7.92	8.40	8.89	13.85	14.34	14.37	14.85	15.34
	8H	7.89	8.32	8.41	8.82	9.39	13.92	14.35	14.43	14.84	15.41