

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: P1062177

Luminaire Tested: S125RDR-H850D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062177
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-H850D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

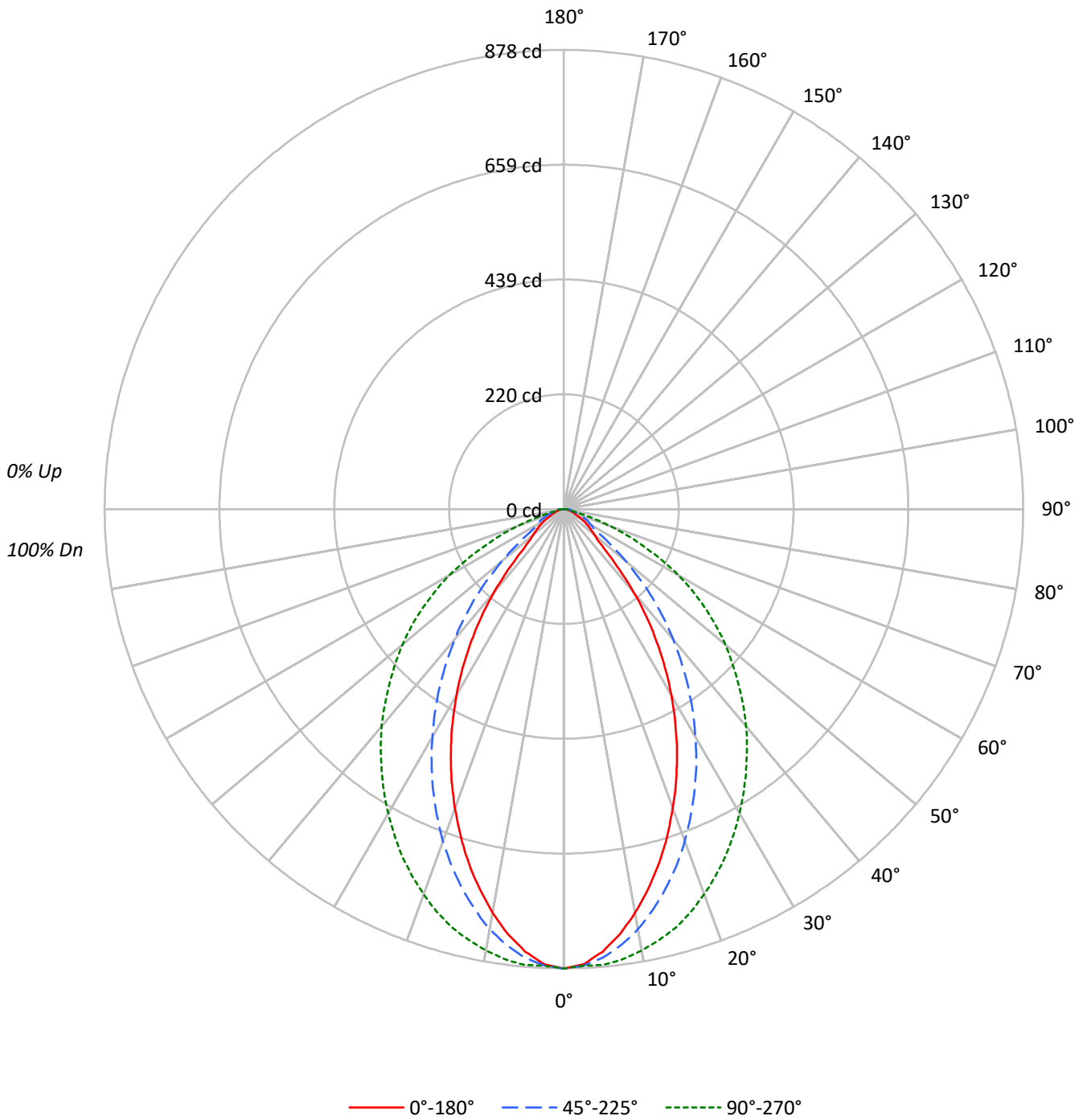
Lumens per Lamp: N/A
Luminaire Lumens: 1272.0 lumens
Efficiency: N/A
Efficacy: 54.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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°	6047	6047	6047
5°	5869	5947	6043
10°	5481	5703	5990
15°	5003	5355	5901
20°	4459	4951	5744
25°	3885	4495	5559
30°	3264	3999	5342
35°	2596	3475	5106
40°	1870	2919	4873
45°	1109	2317	4589
50°	819	1650	4319
55°	695	1019	3954
60°	566	822	3483
65°	442	761	2752
70°	376	658	1842
75°	348	572	745
80°	369	591	519
85°	442	885	592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4589 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	6.4
10°-20°	212.6	16.7
20°-30°	277.8	21.8
30°-40°	270.7	21.3
40°-50°	203.0	16.0
50°-60°	127.3	10.0
60°-70°	66.3	5.2
70°-80°	24.0	1.9
80°-90°	9.5	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°	571.4	44.9
0°-40°	842.0	66.2
0°-60°	1172.3	92.2
0°-90°	1272.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1272.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	878	878	878	878	878	
5°	849	860	860	867	874	79
15°	702	722	751	798	828	196
25°	511	539	592	672	732	234
35°	309	342	413	524	608	192
45°	114	148	238	368	471	96
55°	58	61	85	222	329	52
65°	27	29	47	90	169	28
75°	13	18	22	22	28	14
85°	6	9	11	10	8	6
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	878.2	878.2	878.2	878.2	878.2
2.5°	870.7	879.1	873.5	873.5	873.5
5°	849.2	860.4	860.4	867.0	874.4
7.5°	819.4	832.4	840.8	856.7	867.9
10°	783.9	799.8	815.7	841.8	856.7
12.5°	743.8	762.5	784.9	821.3	843.6
15°	701.8	722.3	751.3	797.9	827.8
17.5°	656.1	680.3	714.9	770.9	807.3
20°	608.5	632.7	675.7	739.1	783.9
22.5°	560.9	587.0	633.7	705.5	758.7
25°	511.4	539.4	591.7	671.9	731.7
27.5°	461.0	490.0	547.8	637.4	701.8
30°	410.6	440.5	503.0	600.1	671.9
32.5°	360.2	392.0	458.2	561.8	640.2
35°	308.9	341.6	413.4	523.5	607.5
37.5°	259.4	292.1	368.6	484.4	574.9
40°	208.1	243.6	324.8	445.2	542.2
42.5°	157.7	194.1	280.9	406.0	506.7
45°	113.9	147.5	238.0	367.7	471.3
47.5°	87.7	106.4	194.1	328.5	436.8
50°	76.5	82.1	154.0	292.1	403.2
52.5°	66.3	70.0	115.7	258.5	366.8
55°	57.9	60.7	84.9	222.1	329.4
57.5°	48.5	52.3	67.2	186.6	291.2
60°	41.1	42.9	59.7	154.0	252.9
62.5°	33.6	35.5	53.2	121.3	210.0
65°	27.1	28.9	46.7	89.6	168.9
67.5°	22.4	23.3	39.2	63.5	129.7
70°	18.7	19.6	32.7	43.9	91.5
72.5°	15.9	18.7	26.1	31.7	57.9
75°	13.1	17.7	21.5	22.4	28.0
77.5°	11.2	16.8	17.7	17.7	15.9
80°	9.3	14.0	14.9	14.0	13.1
82.5°	7.5	11.2	12.1	12.1	10.3
85°	5.6	9.3	11.2	10.3	7.5
87.5°	3.7	8.4	9.3	8.4	5.6
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	6.17	7.53	6.54	7.84	8.15	15.78	17.13	16.15	17.45	17.76
	3H	7.03	8.23	7.41	8.56	8.92	16.62	17.82	17.00	18.15	18.52
	4H	7.45	8.57	7.86	8.92	9.31	16.70	17.82	17.10	18.17	18.55
	6H	7.88	8.91	8.30	9.28	9.67	16.68	17.71	17.09	18.08	18.47
	8H	8.06	9.04	8.49	9.43	9.83	16.67	17.64	17.10	18.03	18.44
	12H	8.22	9.16	8.66	9.54	9.97	16.66	17.59	17.09	17.97	18.40
4H	2H	7.14	8.26	7.54	8.61	8.99	15.64	16.76	16.05	17.11	17.50
	3H	8.19	9.10	8.60	9.51	9.91	16.56	17.47	16.97	17.88	18.28
	4H	8.75	9.57	9.18	9.99	10.43	16.66	17.48	17.09	17.90	18.34
	6H	9.35	10.06	9.81	10.50	10.97	16.69	17.39	17.15	17.84	18.30
	8H	9.59	10.25	10.06	10.69	11.17	16.69	17.35	17.15	17.79	18.26
	12H	9.81	10.40	10.30	10.88	11.35	16.70	17.28	17.19	17.77	18.24
8H	4H	9.22	9.88	9.69	10.33	10.80	16.58	17.24	17.05	17.69	18.16
	6H	10.03	10.57	10.53	11.07	11.55	16.64	17.18	17.14	17.67	18.15
	8H	10.41	10.90	10.93	11.41	11.90	16.67	17.16	17.19	17.67	18.16
	12H	10.80	11.23	11.32	11.73	12.30	16.73	17.16	17.25	17.66	18.23
12H	4H	9.27	9.86	9.76	10.34	10.81	16.55	17.13	17.03	17.62	18.09
	6H	10.15	10.64	10.67	11.16	11.65	16.60	17.09	17.12	17.60	18.10
	8H	10.64	11.07	11.16	11.57	12.14	16.68	17.10	17.19	17.60	18.17