

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: P1061891

Luminaire Tested: S125RDR-H1090D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061891
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D930-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER 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

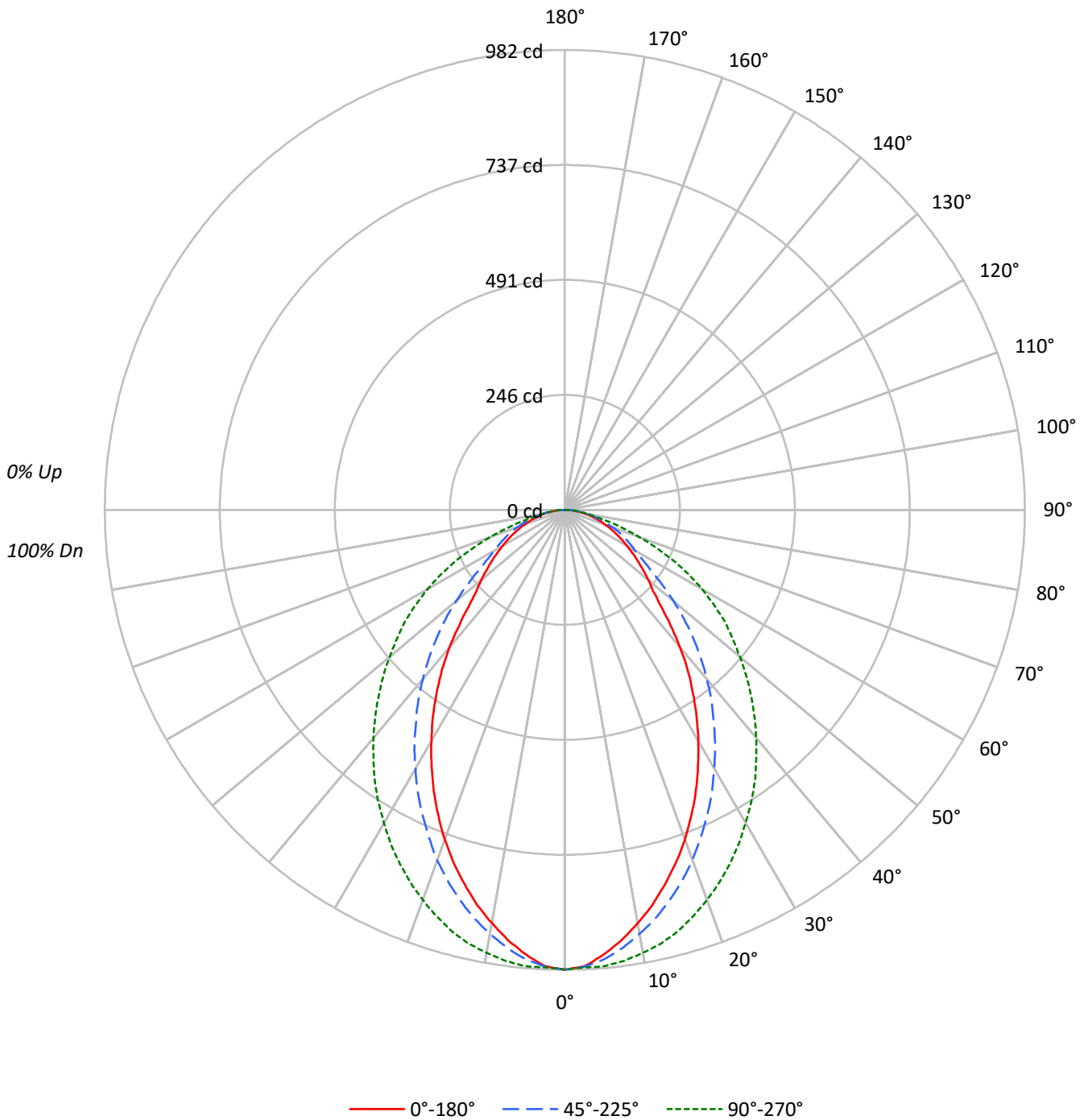
Lumens per Lamp: N/A
Luminaire Lumens: 1840.6 lumens
Efficiency: N/A
Efficacy: 59.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44				44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	41	35	59	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°	6760	6760	6760
5°	6589	6657	6759
10°	6268	6426	6714
15°	5894	6152	6642
20°	5491	5835	6497
25°	5030	5462	6334
30°	4531	5069	6137
35°	4007	4658	5944
40°	3438	4241	5713
45°	2808	3772	5472
50°	2490	3236	5222
55°	2284	2684	5004
60°	2107	2377	4660
65°	1965	2286	4154
70°	1836	2172	3396
75°	1697	2035	2506
80°	1594	1907	1828
85°	1469	1856	1548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5472 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	4.9
10°-20°	244.7	13.3
20°-30°	336.4	18.3
30°-40°	356.5	19.4
40°-50°	311.2	16.9
50°-60°	236.4	12.8
60°-70°	158.4	8.6
70°-80°	81.7	4.4
80°-90°	24.5	1.3
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°	672.0	36.5
0°-40°	1028.5	55.9
0°-60°	1576.0	85.6
0°-90°	1840.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1840.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	953	963	963	970	978	89
15°	827	842	863	901	932	232
25°	662	683	719	779	834	304
35°	477	504	554	633	707	297
45°	288	317	387	480	562	228
55°	190	196	224	329	417	171
65°	121	124	140	187	255	120
75°	64	68	76	81	94	68
85°	19	24	24	22	20	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	981.8	981.8	981.8	981.8	981.8
2.5°	975.0	981.8	975.9	975.9	977.9
5°	953.4	963.2	963.2	970.1	977.9
7.5°	926.9	937.7	943.6	959.3	971.0
10°	896.5	908.3	919.1	942.6	960.3
12.5°	864.1	876.9	893.6	924.0	948.5
15°	826.9	842.5	863.1	901.4	931.8
17.5°	789.6	805.3	830.8	875.9	910.2
20°	749.4	766.0	796.4	845.5	886.7
22.5°	706.2	724.8	757.2	813.1	861.2
25°	662.1	682.7	719.0	778.8	833.7
27.5°	616.0	640.5	679.7	743.5	804.3
30°	569.9	594.4	637.6	707.2	771.9
32.5°	523.8	550.3	597.3	670.9	740.5
35°	476.7	504.2	554.2	632.6	707.2
37.5°	430.6	458.1	514.0	595.4	670.9
40°	382.5	411.0	471.8	557.1	635.6
42.5°	333.5	363.9	429.6	517.9	599.3
45°	288.4	316.8	387.4	479.6	562.0
47.5°	255.0	273.7	345.3	440.4	525.7
50°	232.5	242.3	302.1	402.1	487.5
52.5°	209.9	217.7	261.9	362.9	451.2
55°	190.3	196.2	223.6	328.6	416.9
57.5°	170.7	176.6	194.2	294.3	376.6
60°	153.0	157.9	172.6	258.0	338.4
62.5°	136.3	140.3	156.0	223.6	297.2
65°	120.6	123.6	140.3	187.3	255.0
67.5°	105.0	107.9	124.6	153.0	209.9
70°	91.2	92.2	107.9	124.6	168.7
72.5°	77.5	78.5	91.2	101.0	129.5
75°	63.8	67.7	76.5	81.4	94.2
77.5°	52.0	56.9	61.8	63.8	63.8
80°	40.2	46.1	48.1	48.1	46.1
82.5°	29.4	34.3	35.3	33.3	31.4
85°	18.6	23.5	23.5	21.6	19.6
87.5°	8.8	12.8	12.8	11.8	8.8
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	13.25	14.74	13.61	15.06	15.37	17.17	18.67	17.54	18.99	19.30
	3H	14.82	16.16	15.20	16.49	16.85	18.60	19.94	18.97	20.27	20.63
	4H	15.43	16.69	15.83	17.04	17.42	19.01	20.27	19.41	20.62	21.00
	6H	15.93	17.09	16.34	17.46	17.85	19.23	20.39	19.64	20.76	21.15
	8H	16.10	17.21	16.53	17.60	18.00	19.29	20.39	19.71	20.78	21.18
	12H	16.22	17.28	16.65	17.66	18.09	19.32	20.38	19.75	20.76	21.19
4H	2H	13.99	15.24	14.39	15.59	15.97	17.30	18.56	17.70	18.91	19.29
	3H	15.76	16.81	16.17	17.21	17.61	18.91	19.96	19.32	20.36	20.76
	4H	16.50	17.44	16.93	17.86	18.30	19.44	20.38	19.87	20.79	21.23
	6H	17.14	17.95	17.59	18.40	18.86	19.78	20.60	20.24	21.04	21.50
	8H	17.36	18.13	17.83	18.57	19.04	19.88	20.64	20.34	21.09	21.56
	12H	17.54	18.22	18.02	18.70	19.17	19.95	20.64	20.43	21.11	21.59
8H	4H	16.90	17.66	17.36	18.11	18.58	19.54	20.31	20.01	20.75	21.22
	6H	17.69	18.32	18.18	18.81	19.29	19.98	20.62	20.48	21.11	21.58
	8H	18.01	18.58	18.52	19.09	19.58	20.14	20.71	20.66	21.22	21.71
	12H	18.28	18.78	18.79	19.28	19.84	20.28	20.78	20.79	21.27	21.84
12H	4H	16.94	17.63	17.43	18.11	18.58	19.54	20.23	20.03	20.71	21.18
	6H	17.77	18.34	18.28	18.85	19.34	20.00	20.57	20.51	21.08	21.57
	8H	18.16	18.67	18.67	19.16	19.72	20.21	20.71	20.72	21.20	21.77