

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1175392

Luminaire Tested: S125RDRP-H1090D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175392
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H1090D830-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

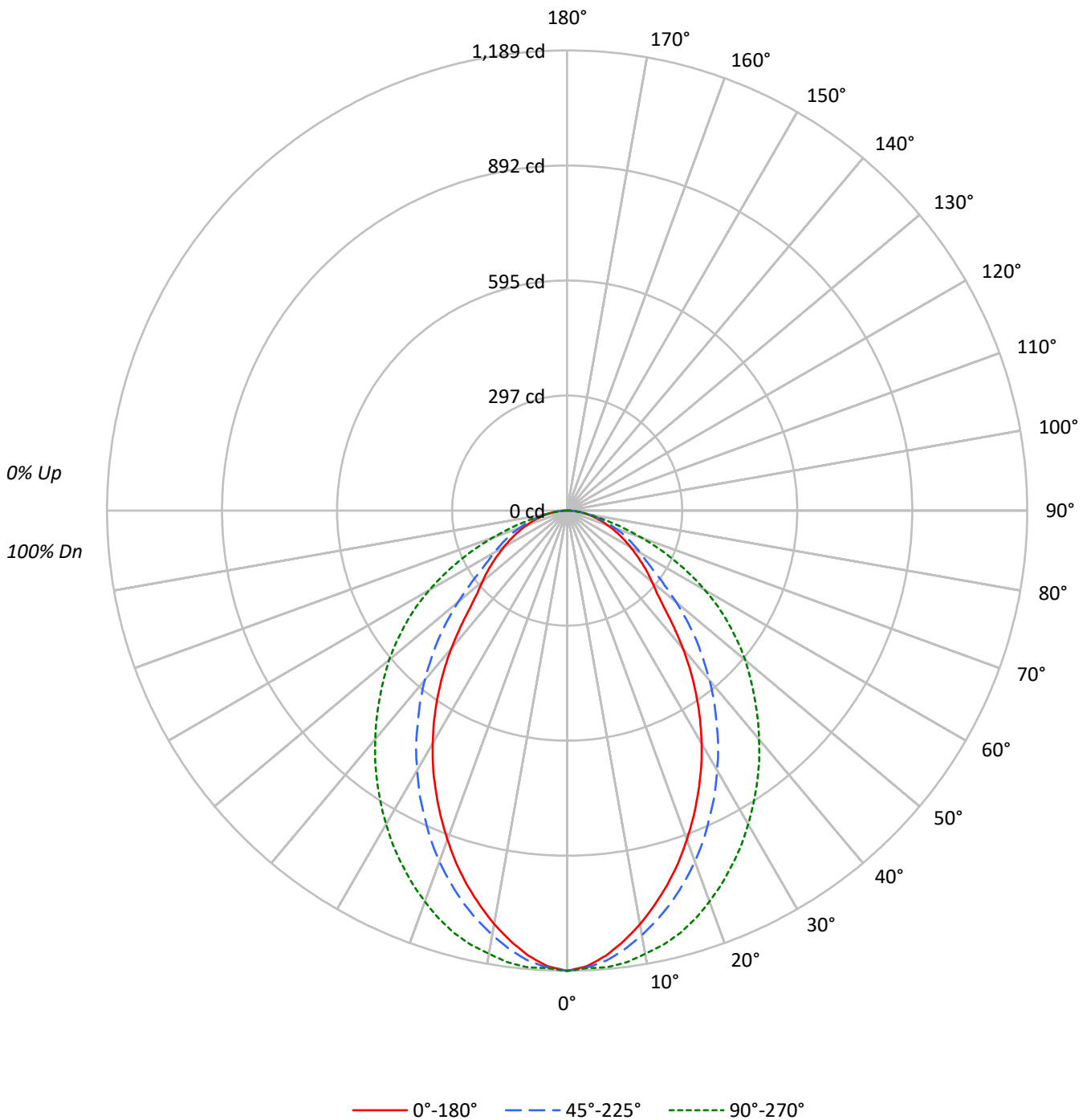
Lumens per Lamp: N/A
Luminaire Lumens: 2240.6 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): 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	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				
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76					74				
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66					64				
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58					56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52					50				
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46					44				
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42					40				
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38					36				
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35					33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32					30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8189	8189	8189
5°	7976	8066	8185
10°	7588	7786	8132
15°	7132	7456	8053
20°	6628	7072	7878
25°	6090	6627	7670
30°	5522	6157	7441
35°	4888	5660	7197
40°	4192	5146	6933
45°	3441	4581	6665
50°	3060	3936	6434
55°	2823	3296	6108
60°	2600	3003	5658
65°	2418	2830	5000
70°	2257	2643	4085
75°	2123	2445	3062
80°	2002	2240	2201
85°	1833	2236	1833

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6665 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.1	4.9
10°-20°	296.8	13.2
20°-30°	408.3	18.2
30°-40°	433.0	19.3
40°-50°	379.0	16.9
50°-60°	290.8	13.0
60°-70°	193.7	8.6
70°-80°	99.3	4.4
80°-90°	29.5	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°	815.2	36.4
0°-40°	1248.2	55.7
0°-60°	1918.1	85.6
0°-90°	2240.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2240.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1189	1189	1189	1189	1189	
5°	1154	1169	1167	1175	1184	108
15°	1000	1024	1046	1095	1130	280
25°	802	829	872	946	1010	368
35°	582	609	673	772	856	362
45°	353	383	470	588	684	279
55°	235	240	275	408	509	211
65°	148	149	174	228	307	148
75°	80	85	92	97	115	85
85°	23	26	28	27	23	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1189.3	1189.3	1189.3	1189.3	1189.3
2.5°	1178.2	1190.3	1181.3	1182.3	1183.3
5°	1154.0	1169.1	1167.1	1175.2	1184.3
7.5°	1121.7	1137.8	1142.9	1163.1	1177.2
10°	1085.3	1103.5	1113.6	1143.9	1163.1
12.5°	1043.9	1065.2	1081.3	1120.7	1148.9
15°	1000.5	1023.8	1046.0	1095.4	1129.8
17.5°	954.1	977.3	1006.6	1063.1	1104.5
20°	904.6	929.9	965.2	1025.8	1075.2
22.5°	854.1	880.4	920.8	987.4	1043.9
25°	801.6	828.9	872.3	946.0	1009.6
27.5°	750.1	775.4	825.9	904.6	974.3
30°	694.6	720.9	774.4	861.2	935.9
32.5°	639.1	665.3	726.9	817.8	896.5
35°	581.5	608.8	673.4	772.4	856.2
37.5°	524.0	552.3	623.9	725.9	814.8
40°	466.4	496.7	572.5	679.5	771.4
42.5°	407.9	440.2	520.0	634.0	728.9
45°	353.4	382.6	470.5	587.6	684.5
47.5°	314.0	331.2	418.0	540.1	642.1
50°	285.7	293.8	367.5	494.7	600.7
52.5°	260.5	265.5	318.0	452.3	555.3
55°	235.2	240.3	274.6	407.9	508.8
57.5°	211.0	214.0	242.3	363.5	462.4
60°	188.8	190.8	218.1	319.0	410.9
62.5°	168.6	169.6	194.9	273.6	359.4
65°	148.4	149.4	173.7	228.2	306.9
67.5°	130.2	130.2	153.5	186.8	256.4
70°	112.1	112.1	131.3	151.4	202.9
72.5°	95.9	97.9	111.1	122.2	158.5
75°	79.8	84.8	91.9	96.9	115.1
77.5°	64.6	70.7	73.7	75.7	76.7
80°	50.5	54.5	56.5	57.5	55.5
82.5°	37.4	40.4	41.4	41.4	38.4
85°	23.2	26.3	28.3	27.3	23.2
87.5°	11.1	15.1	16.2	14.1	11.1
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	13.92	15.42	14.29	15.73	16.05	17.95	19.45	18.31	19.76	20.07
	3H	15.51	16.85	15.89	17.18	17.54	19.33	20.68	19.71	21.01	21.37
	4H	16.15	17.41	16.55	17.76	18.14	19.74	21.00	20.14	21.35	21.73
	6H	16.66	17.82	17.07	18.19	18.58	19.94	21.11	20.36	21.48	21.87
	8H	16.84	17.95	17.27	18.34	18.74	20.00	21.11	20.43	21.50	21.90
	12H	16.97	18.03	17.40	18.41	18.84	20.04	21.10	20.47	21.48	21.91
4H	2H	14.69	15.95	15.09	16.30	16.68	18.08	19.34	18.48	19.69	20.06
	3H	16.47	17.52	16.88	17.92	18.32	19.65	20.69	20.06	21.09	21.49
	4H	17.24	18.18	17.67	18.60	19.04	20.16	21.10	20.59	21.51	21.95
	6H	17.88	18.70	18.34	19.14	19.60	20.48	21.30	20.94	21.74	22.20
	8H	18.11	18.88	18.57	19.32	19.79	20.58	21.35	21.04	21.79	22.26
	12H	18.28	18.97	18.76	19.44	19.92	20.65	21.34	21.14	21.82	22.29
8H	4H	17.62	18.39	18.09	18.83	19.30	20.26	21.02	20.72	21.47	21.93
	6H	18.40	19.03	18.90	19.53	20.00	20.67	21.31	21.17	21.80	22.28
	8H	18.72	19.29	19.23	19.80	20.28	20.83	21.40	21.35	21.91	22.40
	12H	18.98	19.48	19.49	19.97	20.54	20.97	21.47	21.48	21.97	22.53
12H	4H	17.66	18.35	18.15	18.83	19.30	20.25	20.94	20.74	21.42	21.89
	6H	18.48	19.04	18.99	19.55	20.04	20.69	21.25	21.20	21.76	22.25
	8H	18.86	19.36	19.37	19.85	20.42	20.90	21.40	21.41	21.89	22.46