

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: P1175393

Luminaire Tested: S125RDRP-H1090D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175393
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-H1090D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

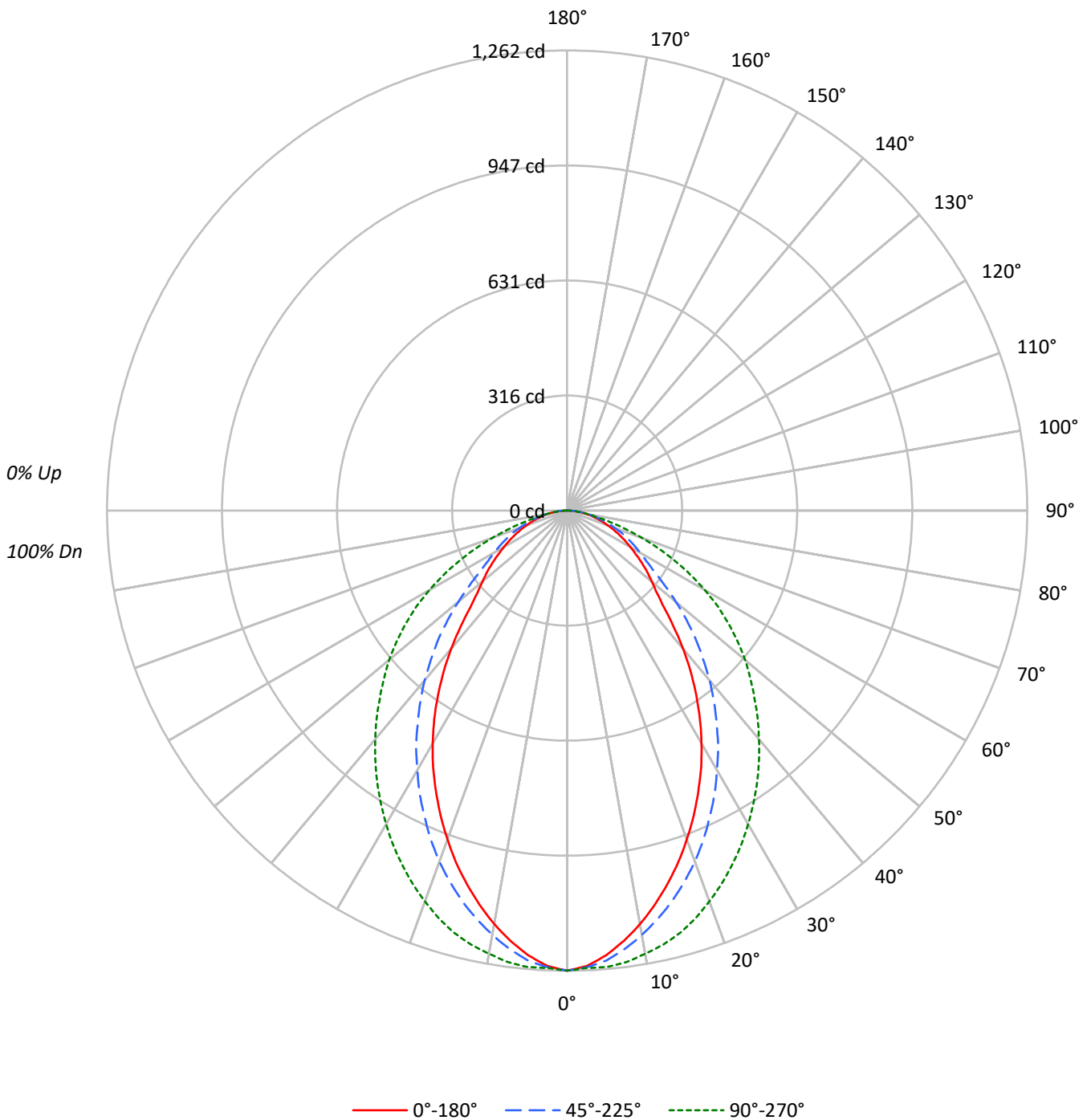
Lumens per Lamp: N/A
Luminaire Lumens: 2377.2 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	8688	8688	8688
5°	8462	8559	8684
10°	8051	8260	8627
15°	7567	7910	8544
20°	7033	7503	8359
25°	6461	7031	8138
30°	5859	6532	7895
35°	5186	6006	7635
40°	4448	5459	7356
45°	3650	4861	7072
50°	3247	4176	6826
55°	2996	3498	6481
60°	2758	3186	6004
65°	2566	3001	5305
70°	2394	2804	4334
75°	2251	2594	3248
80°	2125	2379	2335
85°	1943	2370	1943

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7072 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	4.9
10°-20°	314.9	13.2
20°-30°	433.2	18.2
30°-40°	459.4	19.3
40°-50°	402.1	16.9
50°-60°	308.6	13.0
60°-70°	205.5	8.6
70°-80°	105.4	4.4
80°-90°	31.3	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°	864.9	36.4
0°-40°	1324.3	55.7
0°-60°	2035.0	85.6
0°-90°	2377.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2377.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1262	1262	1262	1262	1262	
5°	1224	1240	1238	1247	1256	115
15°	1062	1086	1110	1162	1199	298
25°	850	879	926	1004	1071	391
35°	617	646	714	819	908	384
45°	375	406	499	623	726	296
55°	250	255	291	433	540	224
65°	158	158	184	242	326	157
75°	85	90	98	103	122	90
85°	25	28	30	29	25	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1261.8	1261.8	1261.8	1261.8	1261.8
2.5°	1250.1	1262.9	1253.3	1254.3	1255.4
5°	1224.3	1240.4	1238.3	1246.8	1256.5
7.5°	1190.1	1207.2	1212.6	1234.0	1249.0
10°	1151.5	1170.8	1181.5	1213.6	1234.0
12.5°	1107.6	1130.1	1147.2	1189.0	1219.0
15°	1061.5	1086.2	1109.7	1162.2	1198.6
17.5°	1012.3	1036.9	1068.0	1127.9	1171.9
20°	959.8	986.5	1024.0	1088.3	1140.8
22.5°	906.2	934.1	976.9	1047.6	1107.6
25°	850.5	879.4	925.5	1003.7	1071.2
27.5°	795.9	822.7	876.2	959.8	1033.7
30°	737.0	764.8	821.6	913.7	993.0
32.5°	678.0	705.9	771.2	867.6	951.2
35°	617.0	645.9	714.5	819.4	908.4
37.5°	555.9	585.9	662.0	770.2	864.4
40°	494.9	527.0	607.4	720.9	818.4
42.5°	432.8	467.0	551.7	672.7	773.4
45°	374.9	406.0	499.2	623.4	726.3
47.5°	333.1	351.3	443.5	573.1	681.3
50°	303.1	311.7	389.9	524.9	637.3
52.5°	276.4	281.7	337.4	479.9	589.1
55°	249.6	254.9	291.4	432.8	539.9
57.5°	223.9	227.1	257.1	385.6	490.6
60°	200.3	202.5	231.4	338.5	436.0
62.5°	178.9	180.0	206.7	290.3	381.3
65°	157.5	158.5	184.2	242.1	325.6
67.5°	138.2	138.2	162.8	198.2	272.1
70°	118.9	118.9	139.3	160.7	215.3
72.5°	101.8	103.9	117.8	129.6	168.2
75°	84.6	90.0	97.5	102.8	122.1
77.5°	68.6	75.0	78.2	80.3	81.4
80°	53.6	57.8	60.0	61.1	58.9
82.5°	39.6	42.8	43.9	43.9	40.7
85°	24.6	27.9	30.0	28.9	24.6
87.5°	11.8	16.1	17.1	15.0	11.8
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	14.13	15.63	14.49	15.94	16.25	18.15	19.65	18.52	19.96	20.28
	3H	15.71	17.06	16.09	17.39	17.75	19.54	20.88	19.92	21.21	21.57
	4H	16.36	17.62	16.76	17.97	18.35	19.94	21.21	20.34	21.55	21.93
	6H	16.87	18.03	17.28	18.40	18.79	20.15	21.31	20.56	21.68	22.07
	8H	17.05	18.16	17.47	18.55	18.95	20.21	21.32	20.63	21.71	22.11
	12H	17.17	18.23	17.60	18.62	19.05	20.24	21.30	20.67	21.68	22.11
4H	2H	14.90	16.16	15.30	16.51	16.88	18.28	19.54	18.68	19.89	20.27
	3H	16.68	17.72	17.09	18.13	18.53	19.85	20.90	20.26	21.30	21.70
	4H	17.45	18.39	17.88	18.80	19.24	20.36	21.30	20.79	21.72	22.16
	6H	18.09	18.91	18.54	19.35	19.81	20.69	21.51	21.15	21.95	22.41
	8H	18.32	19.08	18.78	19.53	19.99	20.79	21.55	21.25	22.00	22.46
	12H	18.49	19.17	18.97	19.65	20.12	20.86	21.54	21.34	22.02	22.49
8H	4H	17.83	18.60	18.29	19.04	19.51	20.46	21.23	20.93	21.67	22.14
	6H	18.61	19.24	19.10	19.73	20.21	20.88	21.51	21.38	22.00	22.48
	8H	18.92	19.49	19.44	20.00	20.49	21.04	21.61	21.55	22.12	22.61
	12H	19.18	19.69	19.69	20.18	20.74	21.18	21.68	21.69	22.17	22.74
12H	4H	17.87	18.55	18.35	19.03	19.50	20.46	21.14	20.94	21.62	22.09
	6H	18.68	19.25	19.20	19.76	20.25	20.89	21.46	21.41	21.97	22.46
	8H	19.07	19.57	19.58	20.06	20.62	21.10	21.60	21.61	22.10	22.66