

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: P1061458

Luminaire Tested: S125RDRP-S1090D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061458
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S1090D840-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

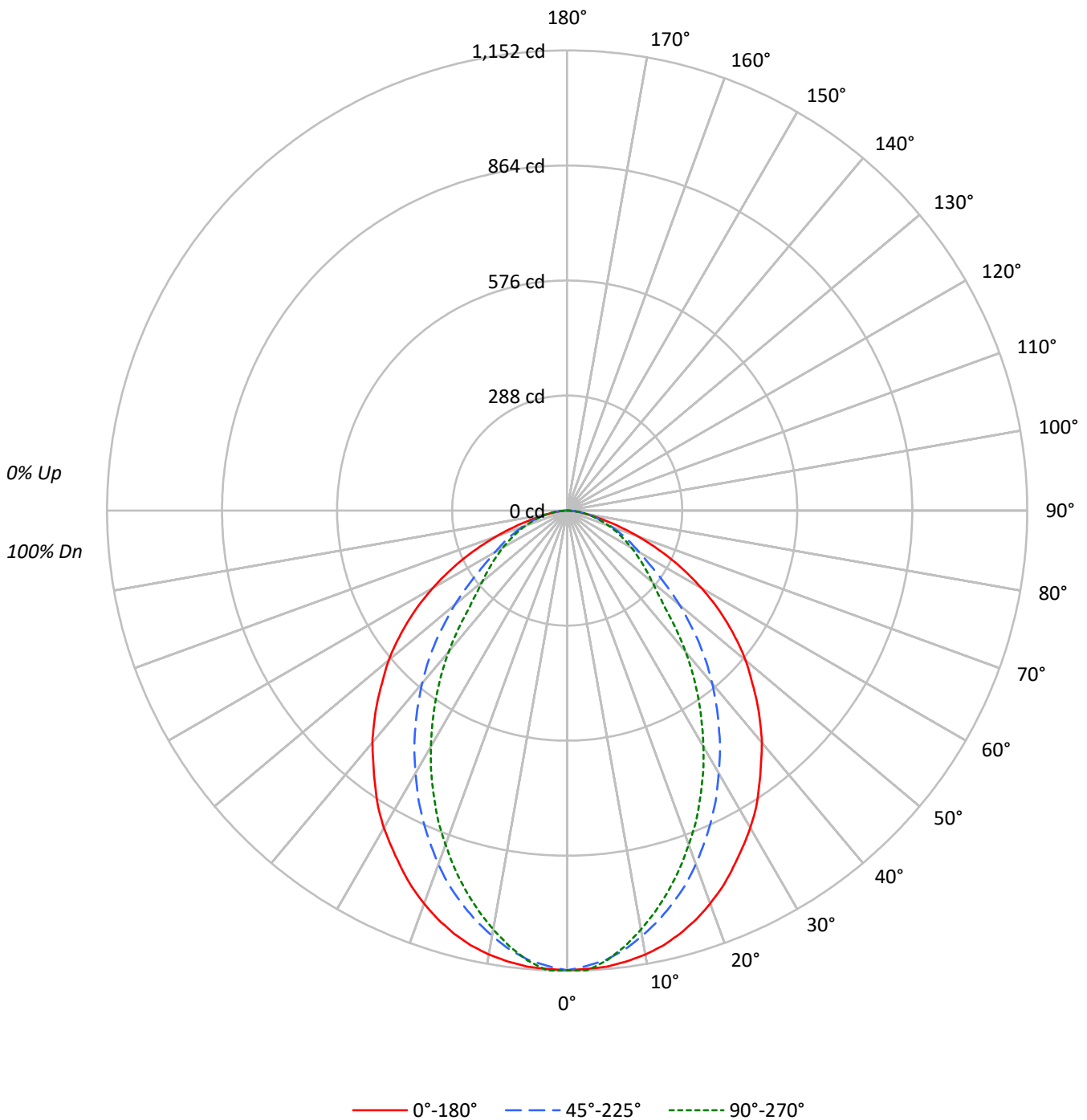
Lumens per Lamp: N/A
Luminaire Lumens: 2180.2 lumens
Efficiency: N/A
Efficacy: 62.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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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CATALOG NUMBER: S125RDRP-S1090D840-X4F0-XX-UDD-WVL-B

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7924	7924	7924
5°	7920	7799	7816
10°	7889	7557	7443
15°	7812	7259	7010
20°	7672	6904	6519
25°	7481	6493	5999
30°	7292	6030	5425
35°	7048	5567	4810
40°	6817	5076	4144
45°	6534	4539	3394
50°	6250	3935	2971
55°	5865	3286	2745
60°	5351	2874	2564
65°	4682	2626	2382
70°	3799	2365	2214
75°	2727	2160	2062
80°	1883	1931	1931
85°	1382	1675	1777

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6534 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.0	4.9
10°-20°	289.4	13.3
20°-30°	400.0	18.3
30°-40°	426.1	19.5
40°-50°	374.3	17.2
50°-60°	283.8	13.0
60°-70°	184.3	8.5
70°-80°	91.3	4.2
80°-90°	23.9	1.1
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°	796.4	36.5
0°-40°	1222.5	56.1
0°-60°	1880.7	86.3
0°-90°	2180.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2180.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1146	1143	1128	1132	1131	109
15°	1096	1071	1018	995	983	309
25°	985	931	855	811	790	454
35°	838	761	662	602	572	525
45°	671	577	466	382	349	517
55°	489	392	274	236	229	436
65°	287	214	161	149	146	284
75°	102	90	81	79	78	114
85°	18	20	21	21	22	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1150.8	1150.8	1150.8	1150.8	1150.8
2.5°	1148.4	1150.8	1140.9	1149.6	1152.1
5°	1145.9	1143.4	1128.4	1132.1	1130.9
7.5°	1138.4	1133.4	1108.4	1105.9	1100.9
10°	1128.4	1115.9	1080.9	1072.1	1064.6
12.5°	1114.6	1094.6	1052.1	1034.6	1025.9
15°	1095.9	1070.9	1018.4	994.7	983.4
17.5°	1073.4	1038.4	983.4	950.9	938.4
20°	1047.1	1005.9	942.2	904.7	889.7
22.5°	1018.4	969.7	898.4	858.5	842.2
25°	984.7	930.9	854.7	811.0	789.7
27.5°	950.9	890.9	808.5	759.7	737.2
30°	917.2	848.5	758.5	706.0	682.3
32.5°	880.9	804.7	712.3	654.8	627.3
35°	838.5	761.0	662.3	602.3	572.3
37.5°	797.2	714.8	613.5	546.1	517.3
40°	758.5	671.0	564.8	491.1	461.1
42.5°	714.8	624.8	516.1	438.6	404.9
45°	671.0	577.3	466.1	382.4	348.6
47.5°	624.8	532.3	413.6	331.1	308.6
50°	583.5	486.1	367.4	292.4	277.4
52.5°	536.1	441.1	319.9	262.4	252.4
55°	488.6	392.4	273.7	236.2	228.7
57.5°	439.8	348.6	237.4	213.7	206.2
60°	388.6	303.6	208.7	189.9	186.2
62.5°	337.4	257.4	183.7	169.9	164.9
65°	287.4	213.7	161.2	148.7	146.2
67.5°	236.2	173.7	138.7	130.0	128.7
70°	188.7	141.2	117.5	112.5	110.0
72.5°	144.9	112.5	98.7	95.0	93.7
75°	102.5	90.0	81.2	78.7	77.5
77.5°	68.7	68.7	65.0	62.5	63.7
80°	47.5	50.0	48.7	48.7	48.7
82.5°	31.2	33.7	35.0	35.0	35.0
85°	17.5	20.0	21.2	21.2	22.5
87.5°	6.2	7.5	8.7	10.0	10.0
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	17.74	19.24	18.11	19.55	19.86	13.99	15.48	14.35	15.79	16.11
	3H	19.06	20.39	19.43	20.72	21.08	15.57	16.91	15.95	17.23	17.60
	4H	19.43	20.68	19.83	21.03	21.41	16.17	17.43	16.57	17.77	18.15
	6H	19.60	20.76	20.01	21.12	21.52	16.64	17.80	17.06	18.17	18.56
	8H	19.64	20.74	20.06	21.13	21.53	16.80	17.90	17.23	18.29	18.70
	12H	19.65	20.70	20.08	21.09	21.51	16.92	17.97	17.35	18.35	18.78
4H	2H	17.86	19.11	18.26	19.46	19.84	14.65	15.90	15.05	16.25	16.63
	3H	19.34	20.38	19.75	20.78	21.18	16.43	17.47	16.84	17.87	18.27
	4H	19.82	20.75	20.25	21.17	21.61	17.15	18.08	17.58	18.50	18.94
	6H	20.10	20.92	20.56	21.36	21.82	17.74	18.55	18.19	18.99	19.45
	8H	20.17	20.93	20.64	21.38	21.84	17.94	18.70	18.41	19.14	19.61
	12H	20.21	20.89	20.70	21.37	21.84	18.10	18.77	18.58	19.25	19.72
8H	4H	19.90	20.66	20.37	21.10	21.57	17.46	18.22	17.92	18.66	19.13
	6H	20.27	20.89	20.76	21.38	21.86	18.17	18.79	18.66	19.28	19.76
	8H	20.38	20.94	20.90	21.45	21.94	18.44	19.00	18.96	19.51	20.00
	12H	20.47	20.96	20.98	21.46	22.02	18.67	19.17	19.18	19.66	20.23
12H	4H	19.90	20.57	20.38	21.05	21.52	17.48	18.16	17.97	18.64	19.11
	6H	20.27	20.83	20.78	21.34	21.83	18.22	18.78	18.73	19.29	19.78
	8H	20.43	20.92	20.94	21.42	21.98	18.55	19.05	19.06	19.54	20.11