

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: P1061467

Luminaire Tested: S125RDRP-S1090D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061467
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-S1090D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

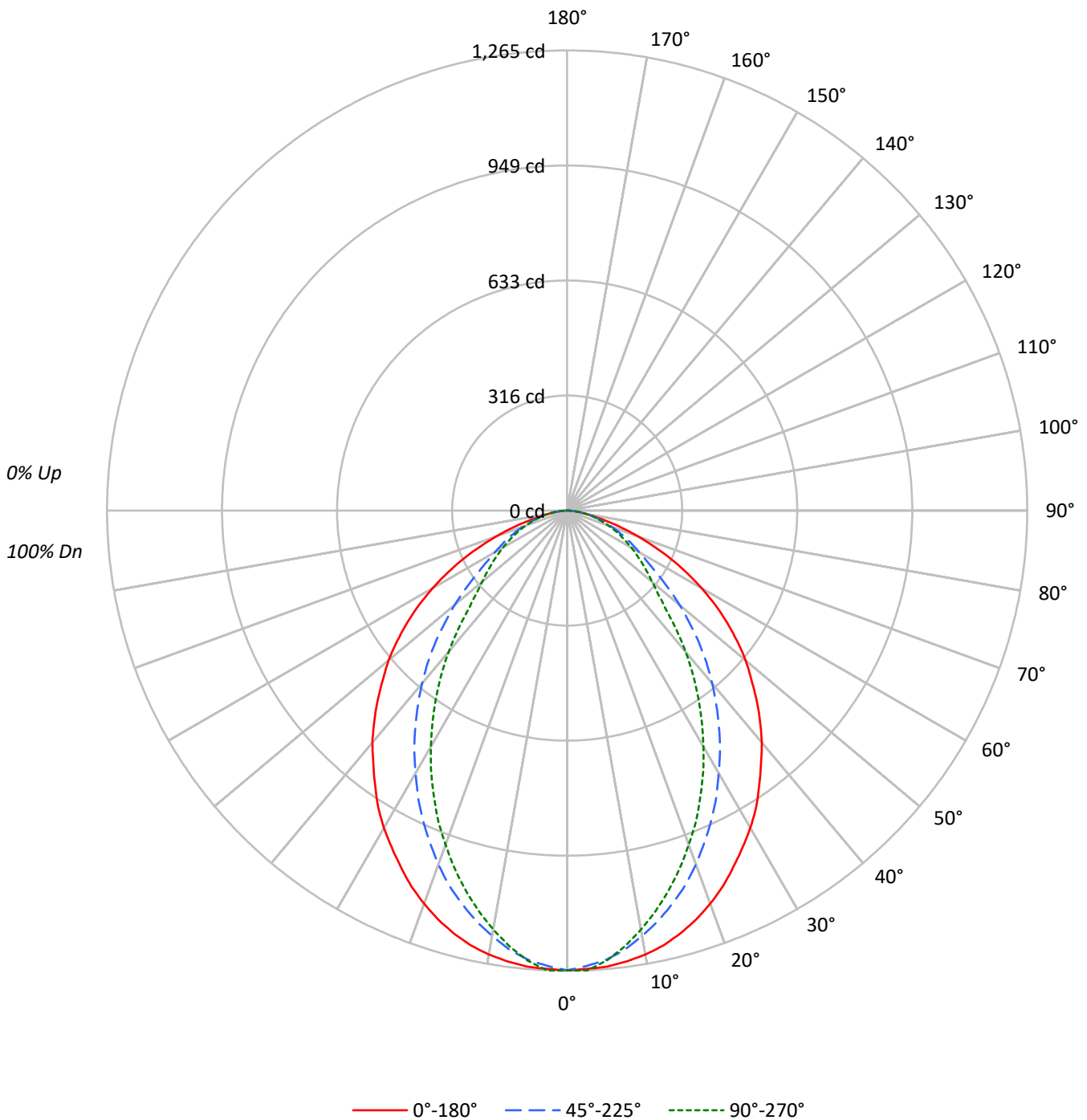
Lumens per Lamp: N/A
Luminaire Lumens: 2394.2 lumens
Efficiency: N/A
Efficacy: 68.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (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	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	108	104	100	97	100	97	94	96	93	91	92	90	89	87									87																			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75									75																			
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65									65																			
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57									57																			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50									50																			
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45									45																			
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40									40																			
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36									36																			
9	61	48	41	35	60	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°	8702	8702	8702
5°	8697	8564	8583
10°	8663	8299	8174
15°	8578	7972	7698
20°	8425	7581	7159
25°	8215	7131	6588
30°	8008	6622	5956
35°	7740	6113	5283
40°	7486	5574	4552
45°	7175	4983	3728
50°	6864	4321	3263
55°	6440	3607	3014
60°	5877	3156	2816
65°	5142	2884	2616
70°	4171	2597	2432
75°	2993	2373	2264
80°	2066	2121	2121
85°	1517	1841	1951

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7175 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.5	4.9
10°-20°	317.8	13.3
20°-30°	439.3	18.3
30°-40°	467.9	19.5
40°-50°	411.0	17.2
50°-60°	311.7	13.0
60°-70°	202.4	8.5
70°-80°	100.3	4.2
80°-90°	26.2	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°	874.6	36.5
0°-40°	1342.5	56.1
0°-60°	2065.3	86.3
0°-90°	2394.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2394.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1264	1264	1264	1264	1264	
5°	1258	1256	1239	1243	1242	119
15°	1203	1176	1118	1092	1080	339
25°	1081	1022	939	891	867	498
35°	921	836	727	661	628	576
45°	737	634	512	420	383	568
55°	536	431	300	259	251	479
65°	316	235	177	163	161	312
75°	112	99	89	86	85	125
85°	19	22	23	23	25	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1263.8	1263.8	1263.8	1263.8	1263.8
2.5°	1261.1	1263.8	1252.8	1262.5	1265.2
5°	1258.3	1255.6	1239.1	1243.2	1241.9
7.5°	1250.1	1244.6	1217.2	1214.4	1208.9
10°	1239.1	1225.4	1187.0	1177.4	1169.1
12.5°	1224.0	1202.1	1155.4	1136.2	1126.6
15°	1203.4	1176.0	1118.4	1092.3	1079.9
17.5°	1178.7	1140.3	1079.9	1044.3	1030.5
20°	1149.9	1104.6	1034.7	993.5	977.0
22.5°	1118.4	1064.9	986.6	942.7	924.9
25°	1081.3	1022.3	938.6	890.6	867.2
27.5°	1044.3	978.4	887.8	834.3	809.6
30°	1007.2	931.7	832.9	775.3	749.2
32.5°	967.4	883.7	782.2	719.0	688.9
35°	920.8	835.7	727.3	661.4	628.5
37.5°	875.5	784.9	673.8	599.7	568.1
40°	832.9	736.9	620.2	539.3	506.4
42.5°	784.9	686.1	566.7	481.7	444.6
45°	736.9	634.0	511.8	419.9	382.9
47.5°	686.1	584.6	454.2	363.6	338.9
50°	640.8	533.8	403.4	321.1	304.6
52.5°	588.7	484.4	351.3	288.2	277.2
55°	536.5	430.9	300.5	259.4	251.1
57.5°	483.0	382.9	260.7	234.7	226.4
60°	426.8	333.5	229.2	208.6	204.5
62.5°	370.5	282.7	201.7	186.6	181.1
65°	315.6	234.7	177.0	163.3	160.6
67.5°	259.4	190.7	152.3	142.7	141.3
70°	207.2	155.1	129.0	123.5	120.8
72.5°	159.2	123.5	108.4	104.3	102.9
75°	112.5	98.8	89.2	86.5	85.1
77.5°	75.5	75.5	71.4	68.6	70.0
80°	52.1	54.9	53.5	53.5	53.5
82.5°	34.3	37.1	38.4	38.4	38.4
85°	19.2	22.0	23.3	23.3	24.7
87.5°	6.9	8.2	9.6	11.0	11.0
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	18.07	19.56	18.44	19.88	20.19	14.31	15.80	14.68	16.12	16.43
	3H	19.38	20.72	19.76	21.05	21.41	15.90	17.23	16.27	17.56	17.92
	4H	19.75	21.00	20.15	21.35	21.73	16.50	17.75	16.90	18.10	18.48
	6H	19.93	21.08	20.34	21.45	21.84	16.97	18.13	17.38	18.49	18.89
	8H	19.96	21.06	20.39	21.45	21.86	17.13	18.23	17.56	18.62	19.02
	12H	19.98	21.03	20.41	21.41	21.84	17.24	18.29	17.67	18.68	19.11
4H	2H	18.18	19.44	18.58	19.78	20.16	14.97	16.23	15.37	16.58	16.95
	3H	19.67	20.71	20.08	21.11	21.51	16.75	17.79	17.17	18.19	18.59
	4H	20.14	21.08	20.58	21.49	21.93	17.47	18.41	17.91	18.82	19.26
	6H	20.43	21.24	20.89	21.68	22.15	18.06	18.87	18.52	19.32	19.78
	8H	20.50	21.26	20.96	21.70	22.17	18.27	19.02	18.73	19.47	19.94
	12H	20.54	21.22	21.02	21.69	22.17	18.42	19.10	18.90	19.58	20.05
8H	4H	20.23	20.99	20.69	21.43	21.90	17.78	18.54	18.25	18.99	19.45
	6H	20.59	21.22	21.09	21.71	22.19	18.49	19.12	18.99	19.61	20.09
	8H	20.71	21.27	21.22	21.78	22.27	18.77	19.33	19.28	19.84	20.33
	12H	20.79	21.29	21.31	21.78	22.35	19.00	19.49	19.51	19.99	20.55
12H	4H	20.22	20.90	20.70	21.38	21.85	17.81	18.49	18.29	18.96	19.44
	6H	20.59	21.16	21.11	21.67	22.15	18.54	19.10	19.06	19.61	20.10
	8H	20.75	21.25	21.26	21.74	22.31	18.88	19.37	19.39	19.87	20.43