

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: P1061539

Luminaire Tested: S125RDRP-S1270D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061539  
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-S1270D840-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: -

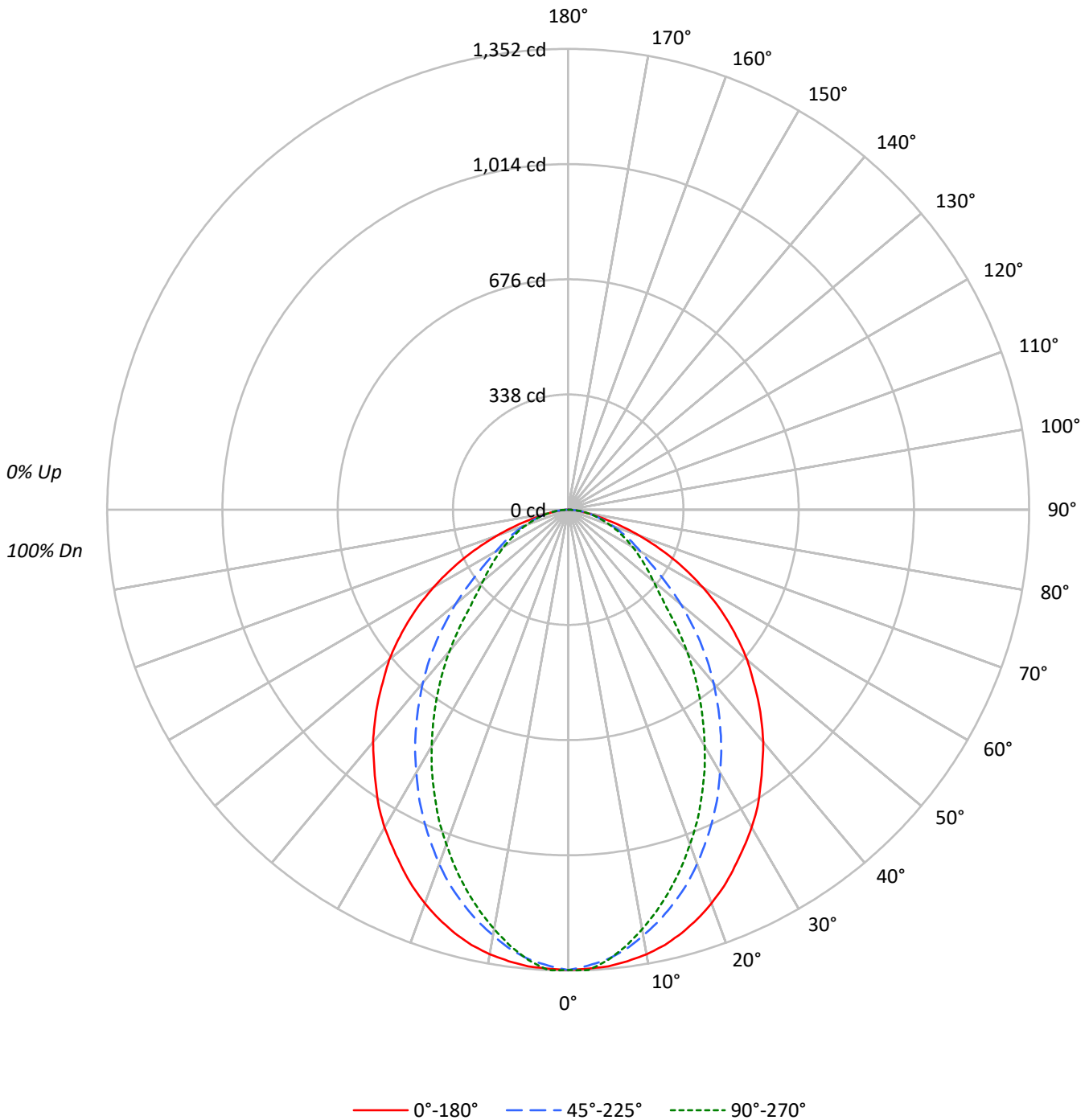
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2558.6 lumens  
Efficiency: N/A  
Efficacy: 61.2 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): 41.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	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	75	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°	9299	9299	9299
5°	9295	9152	9173
10°	9258	8869	8736
15°	9167	8520	8227
20°	9004	8102	7650
25°	8779	7621	7041
30°	8558	7077	6366
35°	8271	6533	5646
40°	8001	5958	4863
45°	7668	5326	3984
50°	7336	4618	3488
55°	6883	3856	3222
60°	6281	3372	3009
65°	5495	3082	2796
70°	4457	2776	2599
75°	3200	2535	2418
80°	2209	2268	2268
85°	1619	1967	2086

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7668 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.6	4.9
10°-20°	339.7	13.3
20°-30°	469.5	18.3
30°-40°	500.0	19.5
40°-50°	439.3	17.2
50°-60°	333.1	13.0
60°-70°	216.3	8.5
70°-80°	107.2	4.2
80°-90°	28.1	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
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0°-30°	934.7	36.5
0°-40°	1434.8	56.1
0°-60°	2207.1	86.3
0°-90°	2558.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2558.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1351	1351	1351	1351	1351	
5°	1345	1342	1324	1329	1327	128
15°	1286	1257	1195	1167	1154	362
25°	1156	1092	1003	952	927	532
35°	984	893	777	707	672	616
45°	788	678	547	449	409	607
55°	573	460	321	277	268	511
65°	337	251	189	174	172	333
75°	120	106	95	92	91	134
85°	20	24	25	25	26	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1350.6	1350.6	1350.6	1350.6	1350.6
2.5°	1347.7	1350.6	1338.9	1349.2	1352.1
5°	1344.8	1341.8	1324.2	1328.6	1327.2
7.5°	1336.0	1330.1	1300.8	1297.8	1292.0
10°	1324.2	1309.6	1268.5	1258.2	1249.5
12.5°	1308.1	1284.6	1234.8	1214.3	1204.0
15°	1286.1	1256.8	1195.2	1167.3	1154.1
17.5°	1259.7	1218.7	1154.1	1116.0	1101.3
20°	1228.9	1180.5	1105.7	1061.7	1044.1
22.5°	1195.2	1138.0	1054.4	1007.5	988.4
25°	1155.6	1092.5	1003.1	951.8	926.8
27.5°	1116.0	1045.6	948.8	891.6	865.2
30°	1076.4	995.7	890.2	828.6	800.7
32.5°	1033.9	944.4	835.9	768.4	736.2
35°	984.0	893.1	777.2	706.8	671.7
37.5°	935.6	838.8	720.0	640.9	607.1
40°	890.2	787.5	662.9	576.3	541.1
42.5°	838.8	733.2	605.7	514.7	475.1
45°	787.5	677.5	547.0	448.7	409.2
47.5°	733.2	624.7	485.4	388.6	362.2
50°	684.9	570.5	431.1	343.2	325.6
52.5°	629.1	517.7	375.4	308.0	296.2
55°	573.4	460.5	321.2	277.2	268.4
57.5°	516.2	409.2	278.6	250.8	242.0
60°	456.1	356.4	244.9	222.9	218.5
62.5°	396.0	302.1	215.6	199.4	193.6
65°	337.3	250.8	189.2	174.5	171.6
67.5°	277.2	203.8	162.8	152.5	151.0
70°	221.4	165.7	137.9	132.0	129.1
72.5°	170.1	132.0	115.9	111.5	110.0
75°	120.3	105.6	95.3	92.4	90.9
77.5°	80.7	80.7	76.3	73.3	74.8
80°	55.7	58.7	57.2	57.2	57.2
82.5°	36.7	39.6	41.1	41.1	41.1
85°	20.5	23.5	24.9	24.9	26.4
87.5°	7.3	8.8	10.3	11.7	11.7
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	18.30	19.79	18.67	20.11	20.42	14.54	16.04	14.91	16.35	16.66
	3H	19.61	20.95	19.99	21.28	21.64	16.13	17.46	16.50	17.79	18.15
	4H	19.98	21.23	20.38	21.58	21.96	16.73	17.98	17.13	18.33	18.71
	6H	20.16	21.31	20.57	21.68	22.07	17.20	18.36	17.61	18.72	19.12
	8H	20.19	21.29	20.62	21.68	22.09	17.36	18.46	17.79	18.85	19.25
	12H	20.21	21.26	20.64	21.64	22.07	17.47	18.53	17.90	18.91	19.34
4H	2H	18.41	19.67	18.81	20.02	20.39	15.20	16.46	15.60	16.81	17.19
	3H	19.90	20.94	20.31	21.34	21.74	16.99	18.02	17.40	18.42	18.83
	4H	20.38	21.31	20.81	21.73	22.16	17.70	18.64	18.14	19.05	19.49
	6H	20.66	21.47	21.12	21.92	22.38	18.29	19.10	18.75	19.55	20.01
	8H	20.73	21.49	21.19	21.93	22.40	18.50	19.26	18.96	19.70	20.17
	12H	20.77	21.45	21.25	21.93	22.40	18.65	19.33	19.14	19.81	20.28
8H	4H	20.46	21.22	20.92	21.66	22.13	18.01	18.77	18.48	19.22	19.68
	6H	20.82	21.45	21.32	21.94	22.42	18.72	19.35	19.22	19.84	20.32
	8H	20.94	21.50	21.45	22.01	22.50	19.00	19.56	19.52	20.07	20.56
	12H	21.03	21.52	21.54	22.01	22.58	19.23	19.73	19.74	20.22	20.78
12H	4H	20.45	21.13	20.94	21.61	22.08	18.04	18.72	18.52	19.20	19.67
	6H	20.83	21.39	21.34	21.90	22.39	18.77	19.33	19.29	19.84	20.33
	8H	20.99	21.48	21.50	21.97	22.54	19.11	19.60	19.62	20.10	20.66