

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: P243630

Luminaire Tested: S125DRP-H1270D927-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P243630  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-51)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DRP-H1270D927-X4F0-XX-UDD-F-W  
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

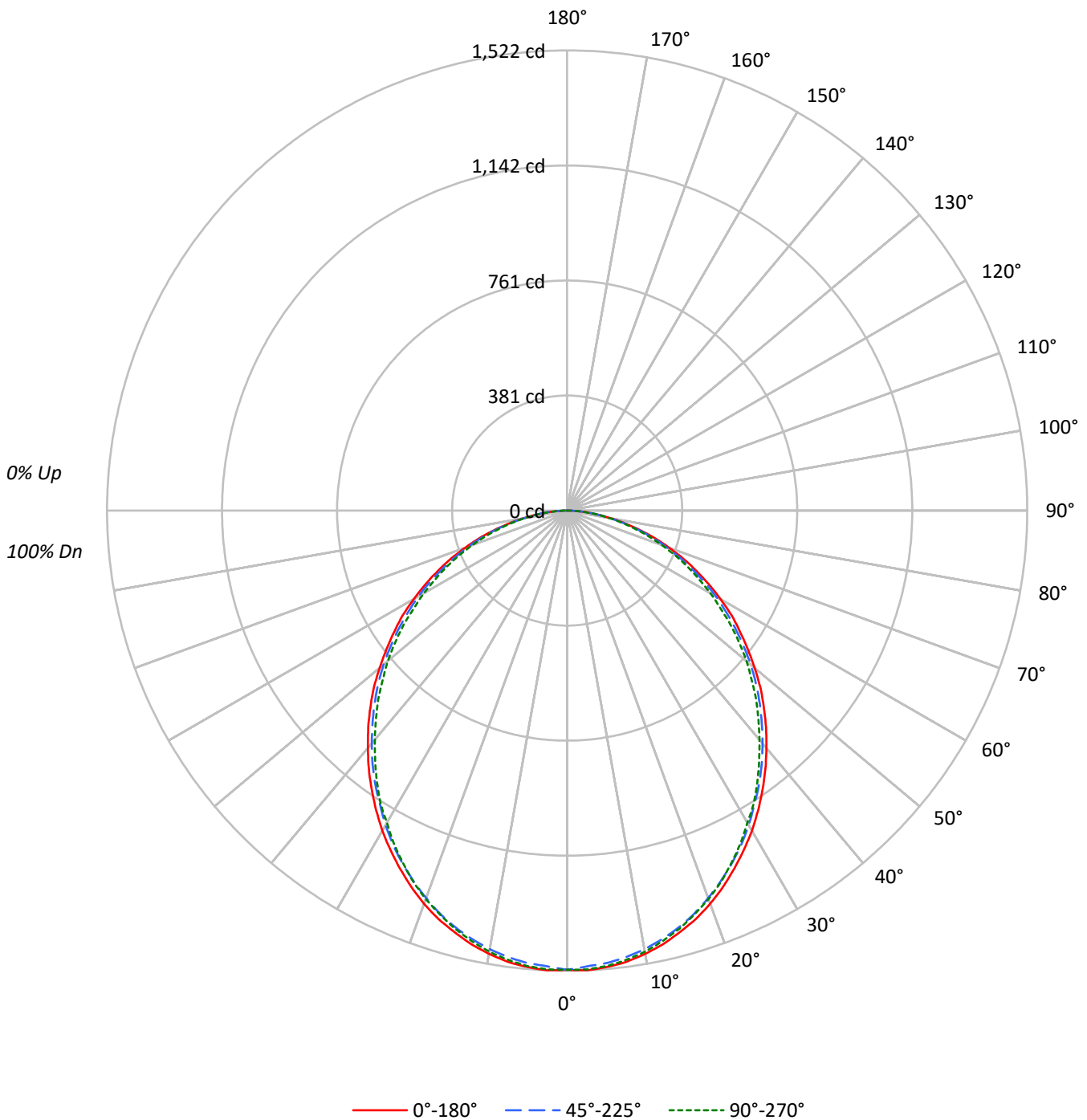
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3920.5 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.7  
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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CATALOG NUMBER: S125DRP-H1270D927-X4F0-XX-UDD-F-W

### 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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44					44			
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39					39			
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10795	10795	10795
5°	10812	10717	10788
10°	10744	10631	10696
15°	10618	10503	10536
20°	10468	10316	10341
25°	10250	10101	10084
30°	10032	9858	9785
35°	9775	9601	9514
40°	9512	9325	9181
45°	9251	9050	8881
50°	8945	8761	8563
55°	8644	8409	8188
60°	8316	8078	7792
65°	7926	7645	7383
70°	7433	7155	6924
75°	6854	6640	6335
80°	5976	5931	5792
85°	5178	5178	4909

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9251 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.3	3.7
10°-20°	404.3	10.3
20°-30°	596.1	15.2
30°-40°	694.2	17.7
40°-50°	695.6	17.7
50°-60°	608.1	15.5
60°-70°	451.3	11.5
70°-80°	255.9	6.5
80°-90°	71.8	1.8
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°	1143.7	29.2
0°-40°	1837.8	46.9
0°-60°	3141.5	80.1
0°-90°	3920.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3920.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1519	1519	1519	1519	1519	
5°	1515	1513	1502	1513	1512	144
15°	1443	1441	1427	1435	1432	407
25°	1307	1303	1288	1292	1286	602
35°	1127	1120	1106	1100	1096	705
45°	920	918	900	887	884	710
55°	698	696	679	664	661	625
65°	471	468	455	445	439	467
75°	250	245	242	237	231	264
85°	64	64	64	61	60	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1518.8	1518.8	1518.8	1518.8	1518.8
2.5°	1522.1	1519.9	1508.8	1519.9	1518.8
5°	1515.4	1513.2	1502.1	1513.2	1512.1
7.5°	1505.4	1502.1	1489.8	1501.0	1498.7
10°	1488.7	1486.5	1473.1	1482.0	1482.0
12.5°	1468.6	1465.3	1451.9	1459.7	1458.6
15°	1443.0	1440.8	1427.4	1435.2	1431.9
17.5°	1416.3	1410.7	1398.4	1405.1	1400.7
20°	1384.0	1379.5	1363.9	1369.5	1367.2
22.5°	1347.2	1341.6	1327.1	1330.5	1329.4
25°	1307.1	1302.6	1288.1	1291.5	1285.9
27.5°	1265.8	1260.3	1246.9	1246.9	1241.3
30°	1222.4	1216.8	1201.2	1201.2	1192.3
32.5°	1175.6	1171.1	1152.2	1151.1	1148.8
35°	1126.6	1119.9	1106.5	1099.8	1096.5
37.5°	1077.5	1072.0	1057.5	1048.6	1043.0
40°	1025.2	1021.8	1005.1	997.3	989.5
42.5°	973.9	970.6	952.7	939.4	936.0
45°	920.4	918.2	900.4	887.0	883.6
47.5°	866.9	864.7	846.9	832.4	826.8
50°	809.0	809.0	792.3	777.8	774.4
52.5°	753.3	752.2	735.4	721.0	717.6
55°	697.6	696.4	678.6	664.1	660.8
57.5°	645.2	638.5	622.9	611.8	600.6
60°	585.0	581.7	568.3	553.8	548.2
62.5°	529.3	524.8	511.5	499.2	491.4
65°	471.3	468.0	454.6	444.6	439.0
67.5°	416.7	412.3	398.9	391.1	386.7
70°	357.7	354.3	344.3	334.3	333.2
72.5°	305.3	300.9	295.3	286.4	281.9
75°	249.6	245.1	241.8	237.3	230.7
77.5°	196.1	193.9	191.7	188.3	185.0
80°	146.0	146.0	144.9	142.6	141.5
82.5°	103.6	104.7	101.4	99.2	99.2
85°	63.5	63.5	63.5	61.3	60.2
87.5°	31.2	27.9	27.9	25.6	25.6
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	19.57	21.19	19.94	21.50	21.82	19.24	20.85	19.60	21.17	21.48
	3H	21.33	22.79	21.71	23.12	23.48	20.95	22.41	21.33	22.74	23.10
	4H	21.98	23.35	22.38	23.70	24.08	21.59	22.96	21.99	23.31	23.69
	6H	22.44	23.72	22.85	24.08	24.47	22.06	23.34	22.47	23.70	24.09
	8H	22.59	23.81	23.02	24.20	24.59	22.22	23.43	22.64	23.82	24.22
	12H	22.69	23.86	23.12	24.24	24.67	22.32	23.48	22.75	23.86	24.29
4H	2H	20.15	21.52	20.54	21.87	22.24	19.88	21.25	20.28	21.60	21.98
	3H	22.13	23.28	22.54	23.68	24.08	21.81	22.96	22.22	23.36	23.76
	4H	22.90	23.94	23.33	24.36	24.79	22.58	23.62	23.01	24.03	24.47
	6H	23.49	24.40	23.95	24.84	25.30	23.18	24.09	23.63	24.53	24.98
	8H	23.69	24.54	24.15	24.98	25.45	23.38	24.23	23.84	24.67	25.14
	12H	23.84	24.60	24.32	25.08	25.55	23.52	24.29	24.00	24.76	25.23
8H	4H	23.19	24.04	23.65	24.48	24.94	22.90	23.75	23.36	24.19	24.66
	6H	23.89	24.60	24.39	25.09	25.57	23.62	24.33	24.11	24.81	25.29
	8H	24.17	24.80	24.68	25.31	25.79	23.89	24.52	24.40	25.03	25.52
	12H	24.39	24.95	24.89	25.44	26.00	24.11	24.67	24.61	25.16	25.72
12H	4H	23.21	23.98	23.69	24.45	24.92	22.93	23.70	23.41	24.17	24.64
	6H	23.94	24.58	24.45	25.09	25.57	23.68	24.31	24.19	24.82	25.31
	8H	24.27	24.83	24.78	25.33	25.89	24.01	24.57	24.51	25.06	25.62