

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: P243757

Luminaire Tested: S125RDRP-H1270D935-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P243757  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H1270D935-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

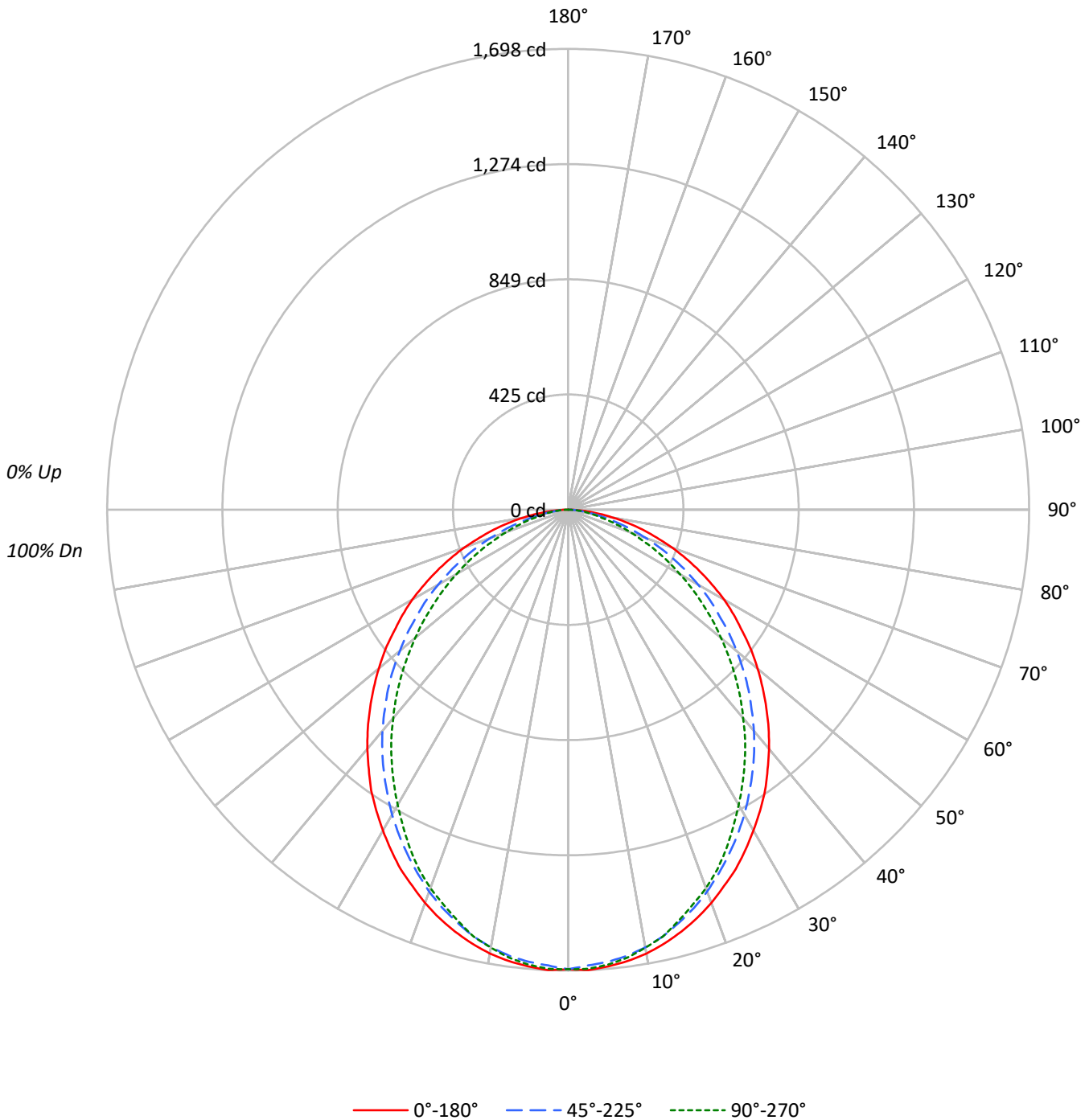
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4047.0 lumens  
Efficiency: N/A  
Efficacy: 107.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26  
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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### 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	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87					85				
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74					72				
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64					61				
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55					53				
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48					46				
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43					41				
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38					36				
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34					32				
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31					29				
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28					27				

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

	0°	45°	90°
0°	12033	12033	12033
5°	12054	11932	12002
10°	11983	11817	11826
15°	11843	11593	11540
20°	11661	11322	11221
25°	11454	10988	10808
30°	11202	10645	10307
35°	10971	10266	9836
40°	10674	9877	9304
45°	10372	9434	8753
50°	10070	8945	8128
55°	9710	8404	7473
60°	9417	7851	6766
65°	8962	7189	5989
70°	8456	6292	5110
75°	7782	5256	4158
80°	6839	4064	3422
85°	5831	3360	3164

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10372 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.5	3.9
10°-20°	446.7	11.0
20°-30°	650.0	16.1
30°-40°	744.4	18.4
40°-50°	728.4	18.0
50°-60°	615.0	15.2
60°-70°	430.6	10.6
70°-80°	218.7	5.4
80°-90°	53.8	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°	1256.1	31.0
0°-40°	2000.6	49.4
0°-60°	3343.9	82.6
0°-90°	4047.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4047.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1693	1693	1693	1693	1693	
5°	1690	1686	1672	1683	1682	160
15°	1610	1604	1576	1574	1568	454
25°	1461	1444	1401	1387	1378	672
35°	1264	1234	1183	1148	1134	789
45°	1032	998	939	889	871	796
55°	784	750	678	624	603	703
65°	533	492	428	374	356	528
75°	283	248	191	160	151	300
85°	72	46	41	39	39	82
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1693.1	1693.1	1693.1	1693.1	1693.1
2.5°	1698.0	1694.3	1681.0	1693.1	1693.1
5°	1689.5	1685.8	1672.5	1683.4	1682.2
7.5°	1677.4	1673.7	1658.0	1668.9	1665.3
10°	1660.4	1655.6	1637.4	1643.5	1638.6
12.5°	1637.4	1632.6	1610.8	1613.2	1610.8
15°	1609.5	1603.5	1575.6	1574.4	1568.4
17.5°	1578.1	1569.6	1539.3	1535.7	1526.0
20°	1541.7	1530.8	1496.9	1489.6	1483.6
22.5°	1500.5	1489.6	1449.7	1438.8	1435.1
25°	1460.6	1443.6	1401.2	1386.7	1378.2
27.5°	1413.4	1394.0	1350.4	1331.0	1316.5
30°	1364.9	1343.1	1297.1	1271.7	1255.9
32.5°	1315.3	1289.8	1240.2	1208.7	1195.4
35°	1264.4	1234.1	1183.2	1148.1	1133.6
37.5°	1206.3	1176.0	1125.1	1083.9	1070.6
40°	1150.5	1119.1	1064.6	1019.7	1002.8
42.5°	1092.4	1059.7	1000.4	953.1	938.6
45°	1031.9	997.9	938.6	888.9	870.8
47.5°	971.3	937.4	875.6	826.0	803.0
50°	910.7	874.4	809.0	758.1	735.1
52.5°	850.2	810.2	746.0	691.5	670.9
55°	783.6	749.7	678.2	623.7	603.1
57.5°	724.2	686.7	618.9	563.2	540.1
60°	662.5	621.3	552.3	497.8	476.0
62.5°	597.1	555.9	489.3	434.8	415.4
65°	532.9	491.7	427.5	374.2	356.1
67.5°	468.7	429.9	365.8	316.1	295.5
70°	406.9	367.0	302.8	258.0	245.9
72.5°	341.5	310.0	245.9	205.9	196.2
75°	283.4	248.3	191.4	159.9	151.4
77.5°	224.1	190.1	141.7	119.9	112.6
80°	167.1	138.1	99.3	86.0	83.6
82.5°	115.1	87.2	65.4	63.0	61.8
85°	71.5	46.0	41.2	38.8	38.8
87.5°	30.3	19.4	19.4	18.2	19.4
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	20.07	21.65	20.43	21.96	22.28	18.56	20.14	18.92	20.45	20.77
	3H	21.83	23.25	22.21	23.58	23.94	19.84	21.26	20.22	21.59	21.95
	4H	22.49	23.82	22.89	24.17	24.55	20.23	21.56	20.62	21.91	22.29
	6H	22.96	24.19	23.37	24.56	24.95	20.46	21.70	20.87	22.06	22.45
	8H	23.10	24.28	23.53	24.67	25.07	20.54	21.72	20.96	22.10	22.50
	12H	23.20	24.33	23.63	24.71	25.14	20.59	21.72	21.02	22.10	22.53
4H	2H	20.47	21.80	20.87	22.15	22.53	19.24	20.58	19.64	20.93	21.30
	3H	22.43	23.54	22.84	23.94	24.34	20.71	21.82	21.12	22.22	22.62
	4H	23.21	24.21	23.64	24.63	25.07	21.17	22.18	21.61	22.59	23.03
	6H	23.80	24.68	24.26	25.12	25.58	21.49	22.37	21.95	22.81	23.27
	8H	23.99	24.81	24.45	25.25	25.72	21.60	22.41	22.06	22.86	23.32
	12H	24.13	24.86	24.61	25.33	25.80	21.68	22.41	22.16	22.89	23.36
8H	4H	23.33	24.15	23.79	24.59	25.06	21.48	22.30	21.94	22.74	23.21
	6H	24.01	24.68	24.50	25.17	25.65	21.88	22.55	22.37	23.04	23.52
	8H	24.24	24.85	24.76	25.36	25.85	22.03	22.64	22.54	23.15	23.63
	12H	24.43	24.97	24.94	25.46	26.02	22.17	22.70	22.68	23.20	23.76
12H	4H	23.32	24.06	23.81	24.53	25.00	21.52	22.25	22.00	22.73	23.20
	6H	24.00	24.61	24.51	25.11	25.60	21.93	22.53	22.44	23.04	23.53
	8H	24.28	24.81	24.78	25.30	25.87	22.13	22.66	22.63	23.15	23.72