

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: P242892

Luminaire Tested: S125RDRP-S1270D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P242892  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1270D930-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

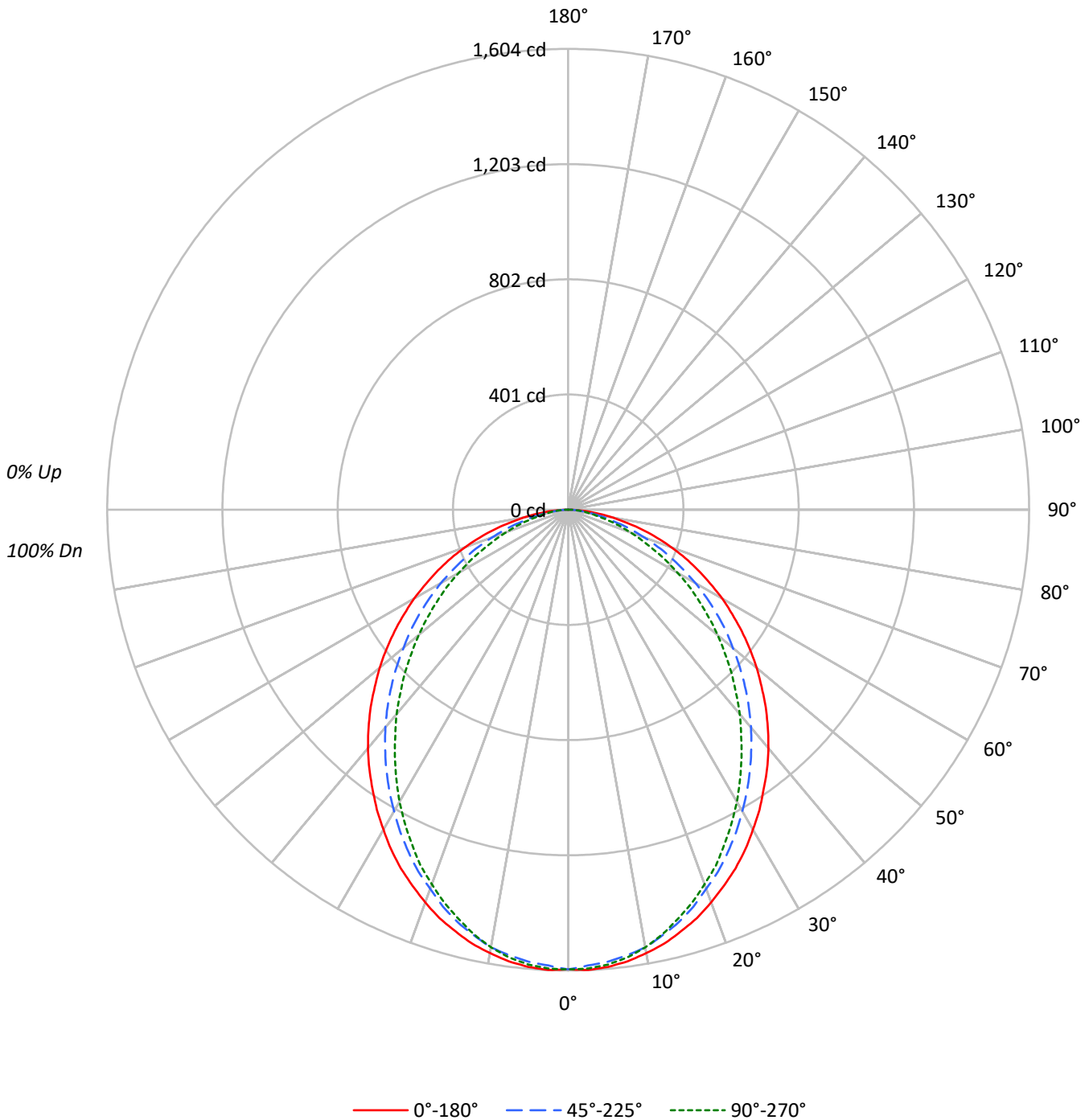
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3779.9 lumens  
Efficiency: N/A  
Efficacy: 92.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.1  
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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61					61			
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53					53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41					41			
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36					36			
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33					33			
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	29					29			
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27					27			

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

	0°	45°	90°
0°	11370	11370	11370
5°	11397	11268	11337
10°	11310	11163	11163
15°	11176	10936	10847
20°	11003	10620	10492
25°	10802	10310	10083
30°	10552	9947	9629
35°	10295	9572	9122
40°	10056	9181	8621
45°	9765	8745	8076
50°	9473	8271	7509
55°	9134	7816	6902
60°	8795	7265	6252
65°	8392	6624	5508
70°	7934	5825	4746
75°	7299	4910	3949
80°	6430	3860	3315
85°	5423	3156	2960

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9765 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.6	4.0
10°-20°	420.8	11.1
20°-30°	610.1	16.1
30°-40°	695.1	18.4
40°-50°	677.5	17.9
50°-60°	570.2	15.1
60°-70°	399.6	10.6
70°-80°	204.8	5.4
80°-90°	51.1	1.4
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°	1181.5	31.3
0°-40°	1876.6	49.6
0°-60°	3124.4	82.7
0°-90°	3779.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3779.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1597	1593	1579	1591	1589	151
15°	1519	1512	1486	1485	1474	428
25°	1378	1359	1315	1299	1286	634
35°	1187	1158	1103	1068	1051	743
45°	972	936	870	822	804	749
55°	737	698	631	576	557	659
65°	499	458	394	346	328	494
75°	266	230	179	152	144	281
85°	66	45	39	38	36	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1599.8	1599.8	1599.8	1599.8	1599.8
2.5°	1603.5	1599.8	1587.8	1599.8	1598.6
5°	1597.4	1592.6	1579.3	1591.4	1589.0
7.5°	1585.3	1580.5	1564.8	1574.5	1572.0
10°	1567.2	1563.6	1546.7	1550.3	1546.7
12.5°	1546.7	1541.8	1517.7	1520.1	1514.0
15°	1518.9	1511.6	1486.3	1485.0	1474.2
17.5°	1489.9	1479.0	1448.8	1442.8	1434.3
20°	1454.8	1442.8	1404.1	1398.0	1387.2
22.5°	1416.2	1404.1	1363.0	1349.7	1341.3
25°	1377.5	1359.4	1314.7	1299.0	1285.7
27.5°	1334.0	1312.3	1265.1	1244.6	1231.3
30°	1285.7	1262.7	1212.0	1184.2	1173.3
32.5°	1238.5	1210.8	1158.8	1127.4	1112.9
35°	1186.6	1157.6	1103.2	1068.2	1051.3
37.5°	1137.0	1102.0	1046.4	1005.3	988.4
40°	1083.9	1047.6	989.6	943.7	929.2
42.5°	1028.3	990.8	930.4	886.9	864.0
45°	971.5	936.5	870.0	821.7	803.5
47.5°	912.3	876.0	809.6	760.0	739.5
50°	856.7	816.8	748.0	697.2	679.1
52.5°	796.3	755.2	691.2	635.6	617.5
55°	737.1	698.4	630.8	576.4	557.0
57.5°	676.7	635.6	570.3	517.2	500.3
60°	618.7	576.4	511.1	458.0	439.8
62.5°	557.0	517.2	450.7	402.4	384.3
65°	499.0	458.0	393.9	345.6	327.5
67.5°	441.0	400.0	338.3	292.4	277.9
70°	381.8	340.8	280.3	242.9	228.4
72.5°	323.8	284.0	228.4	194.5	186.1
75°	265.8	229.6	178.8	152.3	143.8
77.5°	206.6	177.6	135.3	114.8	107.5
80°	157.1	128.1	94.3	83.4	81.0
82.5°	108.8	83.4	62.8	59.2	58.0
85°	66.5	44.7	38.7	37.5	36.3
87.5°	27.8	19.3	18.1	18.1	16.9
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	19.79	21.36	20.15	21.68	21.99	18.22	19.79	18.58	20.11	20.42
	3H	21.57	22.99	21.95	23.32	23.68	19.53	20.95	19.91	21.28	21.64
	4H	22.23	23.57	22.63	23.91	24.29	19.94	21.28	20.34	21.62	22.00
	6H	22.70	23.93	23.11	24.30	24.69	20.20	21.43	20.61	21.80	22.19
	8H	22.85	24.03	23.28	24.42	24.82	20.28	21.45	20.70	21.84	22.24
	12H	22.95	24.07	23.38	24.46	24.88	20.33	21.46	20.76	21.84	22.27
4H	2H	20.18	21.51	20.58	21.86	22.24	18.91	20.24	19.30	20.59	20.96
	3H	22.16	23.27	22.57	23.67	24.07	20.41	21.52	20.82	21.92	22.32
	4H	22.94	23.95	23.38	24.36	24.80	20.90	21.90	21.33	22.32	22.75
	6H	23.54	24.41	23.99	24.85	25.31	21.24	22.12	21.70	22.56	23.02
	8H	23.73	24.55	24.19	24.99	25.46	21.36	22.17	21.82	22.61	23.08
	12H	23.87	24.60	24.35	25.08	25.55	21.44	22.17	21.92	22.65	23.12
8H	4H	23.07	23.88	23.53	24.33	24.79	21.22	22.03	21.68	22.47	22.94
	6H	23.74	24.42	24.24	24.91	25.39	21.64	22.32	22.13	22.80	23.28
	8H	23.99	24.60	24.50	25.11	25.59	21.80	22.40	22.31	22.91	23.40
	12H	24.19	24.72	24.70	25.21	25.78	21.94	22.48	22.45	22.97	23.53
12H	4H	23.06	23.79	23.54	24.27	24.74	21.25	21.98	21.73	22.46	22.93
	6H	23.74	24.35	24.25	24.85	25.34	21.69	22.30	22.20	22.81	23.29
	8H	24.03	24.56	24.53	25.05	25.62	21.90	22.43	22.41	22.92	23.49