

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: P242902

Luminaire Tested: S125RDRP-S1270D940-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242902
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-S1270D940-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

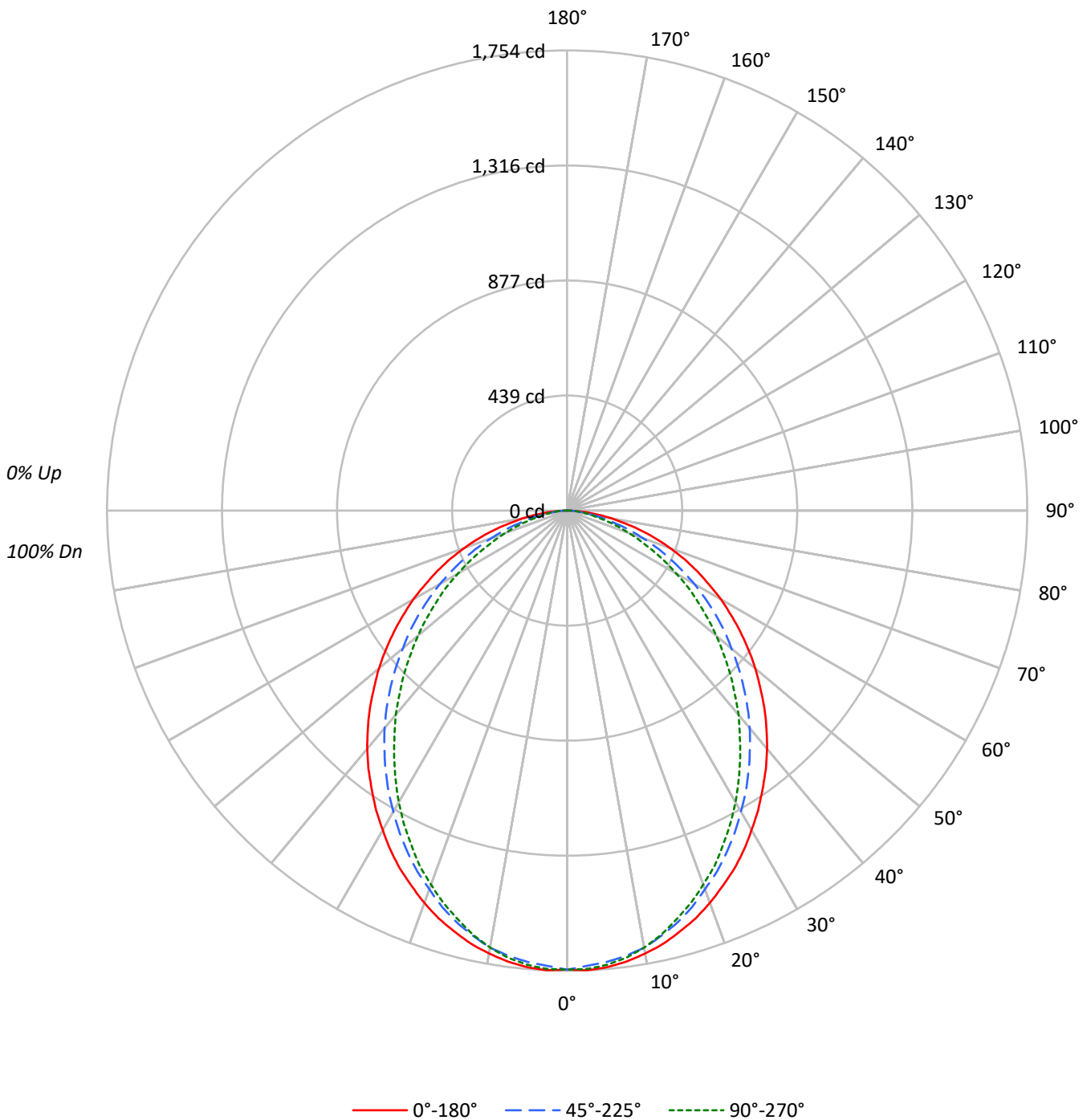
Lumens per Lamp: N/A
Luminaire Lumens: 4134.1 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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	98	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	64	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	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	29
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12436	12436	12436
5°	12465	12323	12399
10°	12371	12208	12208
15°	12223	11961	11863
20°	12035	11615	11475
25°	11815	11276	11028
30°	11540	10878	10532
35°	11260	10469	9976
40°	10999	10042	9429
45°	10681	9564	8834
50°	10360	9046	8212
55°	9990	8549	7550
60°	9619	7946	6839
65°	9179	7245	6022
70°	8678	6371	5191
75°	7983	5371	4320
80°	7032	4220	3622
85°	5929	3449	3229

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10681 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.7	4.0
10°-20°	460.2	11.1
20°-30°	667.3	16.1
30°-40°	760.3	18.4
40°-50°	741.0	17.9
50°-60°	623.6	15.1
60°-70°	437.0	10.6
70°-80°	224.0	5.4
80°-90°	55.9	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°	1292.2	31.3
0°-40°	2052.5	49.6
0°-60°	3417.2	82.7
0°-90°	4134.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4134.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1750	1750	1750	1750	1750	
5°	1747	1742	1727	1740	1738	166
15°	1661	1653	1626	1624	1612	468
25°	1507	1487	1438	1421	1406	693
35°	1298	1266	1207	1168	1150	813
45°	1063	1024	952	899	879	819
55°	806	764	690	630	609	721
65°	546	501	431	378	358	541
75°	291	251	196	166	157	307
85°	73	49	42	41	40	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1749.8	1749.8	1749.8	1749.8	1749.8
2.5°	1753.7	1749.8	1736.6	1749.8	1748.5
5°	1747.1	1741.8	1727.3	1740.5	1737.9
7.5°	1733.9	1728.6	1711.5	1722.0	1719.4
10°	1714.1	1710.1	1691.6	1695.6	1691.6
12.5°	1691.6	1686.3	1659.9	1662.6	1655.9
15°	1661.2	1653.3	1625.5	1624.2	1612.3
17.5°	1629.5	1617.6	1584.6	1578.0	1568.7
20°	1591.2	1578.0	1535.7	1529.1	1517.2
22.5°	1548.9	1535.7	1490.7	1476.2	1467.0
25°	1506.6	1486.8	1437.9	1420.7	1406.2
27.5°	1459.0	1435.2	1383.7	1361.2	1346.7
30°	1406.2	1381.1	1325.5	1295.2	1283.3
32.5°	1354.6	1324.2	1267.4	1233.0	1217.2
35°	1297.8	1266.1	1206.6	1168.3	1149.8
37.5°	1243.6	1205.3	1144.5	1099.6	1081.1
40°	1185.5	1145.8	1082.4	1032.2	1016.3
42.5°	1124.7	1083.7	1017.6	970.0	944.9
45°	1062.6	1024.2	951.5	898.7	878.9
47.5°	997.8	958.1	885.5	831.3	808.8
50°	937.0	893.4	818.1	762.6	742.7
52.5°	870.9	826.0	755.9	695.2	675.3
55°	806.2	763.9	689.9	630.4	609.3
57.5°	740.1	695.2	623.8	565.6	547.1
60°	676.7	630.4	559.0	500.9	481.1
62.5°	609.3	565.6	493.0	440.1	420.3
65°	545.8	500.9	430.8	378.0	358.1
67.5°	482.4	437.4	370.0	319.8	304.0
70°	417.6	372.7	306.6	265.6	249.8
72.5°	354.2	310.6	249.8	212.8	203.5
75°	290.7	251.1	195.6	166.5	157.3
77.5°	226.0	194.3	148.0	125.6	117.6
80°	171.8	140.1	103.1	91.2	88.5
82.5°	118.9	91.2	68.7	64.8	63.4
85°	72.7	48.9	42.3	41.0	39.6
87.5°	30.4	21.1	19.8	19.8	18.5
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	20.10	21.67	20.46	21.99	22.30	18.53	20.10	18.89	20.42	20.73
	3H	21.88	23.30	22.26	23.63	23.99	19.84	21.26	20.22	21.59	21.95
	4H	22.54	23.88	22.94	24.22	24.60	20.25	21.59	20.65	21.93	22.31
	6H	23.01	24.25	23.42	24.61	25.00	20.51	21.74	20.92	22.11	22.50
	8H	23.16	24.34	23.59	24.73	25.13	20.59	21.77	21.02	22.15	22.55
	12H	23.26	24.38	23.69	24.77	25.20	20.64	21.77	21.07	22.15	22.58
4H	2H	20.49	21.82	20.89	22.17	22.55	19.22	20.55	19.62	20.90	21.27
	3H	22.47	23.58	22.88	23.98	24.38	20.72	21.83	21.13	22.23	22.63
	4H	23.26	24.26	23.69	24.67	25.11	21.21	22.21	21.64	22.63	23.07
	6H	23.85	24.72	24.30	25.16	25.62	21.56	22.43	22.01	22.87	23.33
	8H	24.04	24.86	24.50	25.30	25.77	21.67	22.48	22.13	22.92	23.39
	12H	24.18	24.91	24.66	25.39	25.86	21.75	22.48	22.23	22.96	23.43
8H	4H	23.38	24.20	23.84	24.64	25.10	21.53	22.34	21.99	22.79	23.25
	6H	24.06	24.73	24.55	25.22	25.70	21.95	22.63	22.45	23.12	23.59
	8H	24.30	24.91	24.81	25.42	25.90	22.11	22.72	22.62	23.22	23.71
	12H	24.50	25.03	25.01	25.53	26.09	22.25	22.79	22.76	23.28	23.84
12H	4H	23.37	24.10	23.85	24.58	25.05	21.56	22.29	22.05	22.77	23.24
	6H	24.05	24.66	24.56	25.16	25.65	22.00	22.61	22.51	23.12	23.60
	8H	24.34	24.87	24.85	25.36	25.93	22.21	22.74	22.72	23.24	23.80