

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: P242873

Luminaire Tested: S125RDRP-S1270D927-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242873
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-S1270D927-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

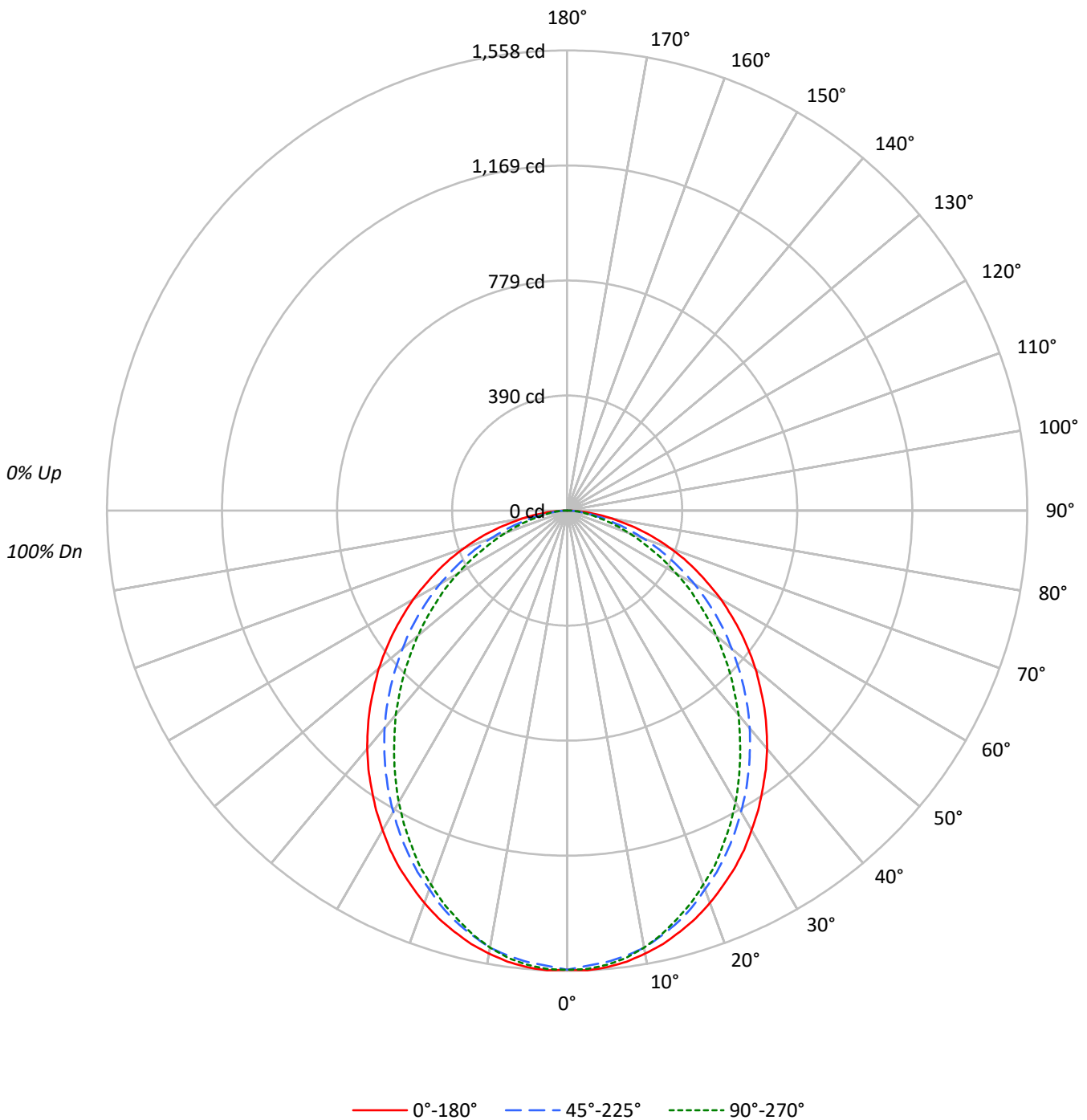
Lumens per Lamp: N/A
Luminaire Lumens: 3672.7 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (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					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°	11048	11048	11048
5°	11073	10948	11015
10°	10990	10846	10846
15°	10859	10626	10540
20°	10692	10319	10194
25°	10496	10017	9796
30°	10252	9664	9356
35°	10003	9300	8862
40°	9771	8922	8377
45°	9488	8496	7848
50°	9204	8036	7295
55°	8875	7595	6706
60°	8544	7059	6075
65°	8155	6436	5351
70°	7710	5661	4611
75°	7093	4773	3836
80°	6246	3749	3221
85°	5268	3066	2870

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9488 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.3	4.0
10°-20°	408.9	11.1
20°-30°	592.8	16.1
30°-40°	675.4	18.4
40°-50°	658.3	17.9
50°-60°	554.0	15.1
60°-70°	388.2	10.6
70°-80°	199.0	5.4
80°-90°	49.6	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°	1148.0	31.3
0°-40°	1823.4	49.6
0°-60°	3035.7	82.7
0°-90°	3672.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3672.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1552	1547	1534	1546	1544	147
15°	1476	1469	1444	1443	1432	416
25°	1338	1321	1277	1262	1249	616
35°	1153	1125	1072	1038	1021	722
45°	944	910	845	798	781	728
55°	716	679	613	560	541	640
65°	485	445	383	336	318	480
75°	258	223	174	148	140	273
85°	65	43	38	36	35	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1554.5	1554.5	1554.5	1554.5	1554.5
2.5°	1558.0	1554.5	1542.7	1554.5	1553.3
5°	1552.1	1547.4	1534.5	1546.3	1543.9
7.5°	1540.4	1535.7	1520.4	1529.8	1527.5
10°	1522.8	1519.3	1502.8	1506.3	1502.8
12.5°	1502.8	1498.1	1474.6	1477.0	1471.1
15°	1475.8	1468.8	1444.1	1442.9	1432.4
17.5°	1447.6	1437.1	1407.7	1401.8	1393.6
20°	1413.6	1401.8	1364.3	1358.4	1347.8
22.5°	1376.0	1364.3	1324.4	1311.4	1303.2
25°	1338.4	1320.8	1277.4	1262.1	1249.2
27.5°	1296.2	1275.0	1229.3	1209.3	1196.4
30°	1249.2	1226.9	1177.6	1150.6	1140.0
32.5°	1203.4	1176.4	1125.9	1095.4	1081.3
35°	1152.9	1124.8	1071.9	1037.9	1021.4
37.5°	1104.8	1070.8	1016.7	976.8	960.4
40°	1053.1	1017.9	961.6	917.0	902.9
42.5°	999.1	962.7	904.0	861.8	839.5
45°	944.0	909.9	845.3	798.4	780.8
47.5°	886.4	851.2	786.6	738.5	718.5
50°	832.4	793.7	726.8	677.4	659.8
52.5°	773.7	733.8	671.6	617.6	600.0
55°	716.2	678.6	612.9	560.0	541.2
57.5°	657.5	617.6	554.2	502.5	486.1
60°	601.1	560.0	496.6	445.0	427.4
62.5°	541.2	502.5	437.9	391.0	373.4
65°	484.9	445.0	382.7	335.8	318.2
67.5°	428.5	388.6	328.7	284.1	270.0
70°	371.0	331.1	272.4	236.0	221.9
72.5°	314.7	275.9	221.9	189.0	180.8
75°	258.3	223.1	173.8	147.9	139.7
77.5°	200.8	172.6	131.5	111.5	104.5
80°	152.6	124.5	91.6	81.0	78.7
82.5°	105.7	81.0	61.1	57.5	56.4
85°	64.6	43.4	37.6	36.4	35.2
87.5°	27.0	18.8	17.6	17.6	16.4
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	19.69	21.26	20.05	21.58	21.89	18.12	19.69	18.48	20.01	20.32
	3H	21.47	22.89	21.85	23.22	23.58	19.43	20.85	19.81	21.18	21.54
	4H	22.13	23.47	22.53	23.81	24.19	19.84	21.17	20.24	21.52	21.90
	6H	22.60	23.83	23.01	24.20	24.59	20.10	21.33	20.51	21.70	22.09
	8H	22.75	23.93	23.18	24.32	24.72	20.18	21.35	20.60	21.74	22.14
	12H	22.85	23.97	23.28	24.36	24.78	20.23	21.36	20.66	21.74	22.17
4H	2H	20.08	21.41	20.48	21.76	22.14	18.81	20.14	19.20	20.49	20.86
	3H	22.06	23.17	22.47	23.57	23.97	20.31	21.42	20.72	21.82	22.22
	4H	22.84	23.85	23.28	24.26	24.70	20.80	21.80	21.23	22.22	22.65
	6H	23.44	24.31	23.89	24.75	25.21	21.14	22.02	21.60	22.46	22.92
	8H	23.63	24.45	24.09	24.89	25.36	21.25	22.07	21.72	22.51	22.98
	12H	23.77	24.50	24.25	24.98	25.45	21.34	22.07	21.82	22.55	23.02
8H	4H	22.97	23.78	23.43	24.23	24.69	21.12	21.93	21.58	22.37	22.84
	6H	23.64	24.32	24.14	24.81	25.29	21.54	22.21	22.03	22.70	23.18
	8H	23.89	24.50	24.40	25.01	25.49	21.70	22.30	22.21	22.81	23.30
	12H	24.09	24.62	24.60	25.11	25.68	21.84	22.37	22.35	22.87	23.43
12H	4H	22.96	23.69	23.44	24.17	24.64	21.15	21.88	21.63	22.36	22.83
	6H	23.64	24.25	24.15	24.75	25.24	21.59	22.20	22.10	22.71	23.19
	8H	23.93	24.46	24.43	24.95	25.52	21.80	22.33	22.31	22.82	23.39