

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: P243751

Luminaire Tested: S125RDRP-H1090D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243751
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-H1090D930-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

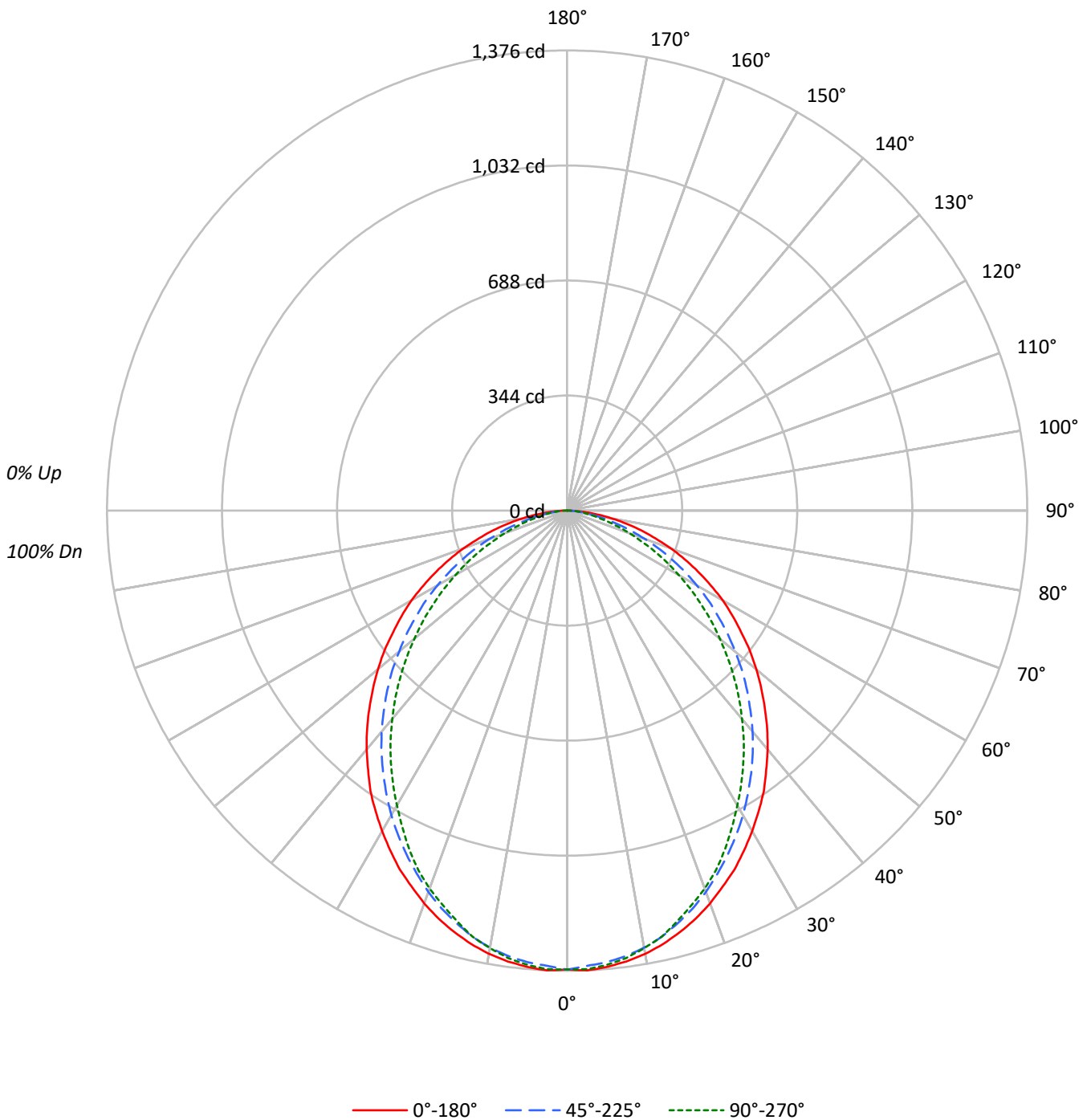
Lumens per Lamp: N/A
Luminaire Lumens: 3280.4 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 31.5
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

TEST NUMBER: P243751

CATALOG NUMBER: S125RDRP-H1090D930-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P243751

CATALOG NUMBER: S125RDRP-H1090D930-X4F0-XX-UDD-F-W

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	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°	9754	9754	9754
5°	9771	9672	9729
10°	9713	9579	9586
15°	9600	9398	9354
20°	9452	9178	9096
25°	9284	8907	8761
30°	9080	8629	8355
35°	8893	8322	7973
40°	8653	8006	7541
45°	8407	7647	7094
50°	8162	7251	6589
55°	7871	6813	6058
60°	7633	6364	5484
65°	7263	5827	4854
70°	6855	5100	4142
75°	6308	4259	3369
80°	5546	3295	2771
85°	4722	2724	2561

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8407 cd/sqm



TEST NUMBER: P243751

CATALOG NUMBER: S125RDRP-H1090D930-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.3	3.9
10°-20°	362.1	11.0
20°-30°	526.9	16.1
30°-40°	603.4	18.4
40°-50°	590.4	18.0
50°-60°	498.5	15.2
60°-70°	349.0	10.6
70°-80°	177.2	5.4
80°-90°	43.6	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°	1018.2	31.0
0°-40°	1621.6	49.4
0°-60°	2710.6	82.6
0°-90°	3280.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3280.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1370	1366	1356	1365	1364	130
15°	1305	1300	1277	1276	1271	368
25°	1184	1170	1136	1124	1117	545
35°	1025	1000	959	931	919	640
45°	836	809	761	721	706	645
55°	635	608	550	506	489	570
65°	432	399	346	303	289	428
75°	230	201	155	130	123	243
85°	58	37	33	31	31	66
90°	0	0	0	0	0	



TEST NUMBER: P243751

CATALOG NUMBER: S125RDRP-H1090D930-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1372.4	1372.4	1372.4	1372.4	1372.4
2.5°	1376.3	1373.4	1362.6	1372.4	1372.4
5°	1369.5	1366.5	1355.7	1364.6	1363.6
7.5°	1359.7	1356.7	1343.9	1352.8	1349.8
10°	1345.9	1342.0	1327.3	1332.2	1328.2
12.5°	1327.3	1323.3	1305.7	1307.6	1305.7
15°	1304.7	1299.8	1277.2	1276.2	1271.3
17.5°	1279.2	1272.3	1247.7	1244.8	1236.9
20°	1249.7	1240.9	1213.4	1207.5	1202.6
22.5°	1216.3	1207.5	1175.1	1166.3	1163.3
25°	1183.9	1170.2	1135.8	1124.0	1117.2
27.5°	1145.6	1129.9	1094.6	1078.9	1067.1
30°	1106.4	1088.7	1051.4	1030.8	1018.0
32.5°	1066.1	1045.5	1005.3	979.7	968.9
35°	1024.9	1000.4	959.1	930.7	918.9
37.5°	977.8	953.2	912.0	878.6	867.8
40°	932.6	907.1	862.9	826.6	812.8
42.5°	885.5	859.0	810.9	772.6	760.8
45°	836.4	808.9	760.8	720.6	705.8
47.5°	787.3	759.8	709.8	669.5	650.9
50°	738.2	708.8	655.8	614.5	595.9
52.5°	689.2	656.8	604.7	560.6	543.9
55°	635.2	607.7	549.8	505.6	488.9
57.5°	587.1	556.6	501.6	456.5	437.8
60°	537.0	503.6	447.7	403.5	385.8
62.5°	484.0	450.6	396.6	352.4	336.7
65°	431.9	398.6	346.5	303.3	288.6
67.5°	379.9	348.5	296.5	256.2	239.5
70°	329.9	297.5	245.4	209.1	199.3
72.5°	276.8	251.3	199.3	166.9	159.0
75°	229.7	201.2	155.1	129.6	122.7
77.5°	181.6	154.1	114.9	97.2	91.3
80°	135.5	111.9	80.5	69.7	67.7
82.5°	93.3	70.7	53.0	51.0	50.1
85°	57.9	37.3	33.4	31.4	31.4
87.5°	24.5	15.7	15.7	14.7	15.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P243751
 CATALOG NUMBER: S125RDRP-H1090D930-X4F0-XX-UDD-F-W

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	19.34	20.92	19.70	21.23	21.55	17.83	19.41	18.19	19.72	20.04
	3H	21.10	22.52	21.48	22.85	23.21	19.11	20.53	19.49	20.86	21.22
	4H	21.76	23.09	22.16	23.44	23.82	19.50	20.83	19.89	21.18	21.56
	6H	22.23	23.46	22.64	23.83	24.22	19.73	20.97	20.14	21.33	21.72
	8H	22.37	23.55	22.80	23.94	24.34	19.81	20.99	20.23	21.37	21.77
	12H	22.47	23.60	22.90	23.98	24.41	19.86	20.99	20.29	21.37	21.80
4H	2H	19.74	21.07	20.14	21.42	21.80	18.51	19.85	18.91	20.20	20.57
	3H	21.70	22.81	22.11	23.21	23.61	19.98	21.09	20.39	21.49	21.89
	4H	22.48	23.48	22.91	23.90	24.34	20.44	21.45	20.88	21.86	22.30
	6H	23.08	23.95	23.53	24.39	24.85	20.76	21.64	21.22	22.08	22.54
	8H	23.26	24.08	23.72	24.52	24.99	20.87	21.68	21.33	22.13	22.59
	12H	23.40	24.13	23.88	24.60	25.07	20.95	21.68	21.43	22.16	22.63
8H	4H	22.60	23.42	23.06	23.86	24.33	20.75	21.57	21.21	22.01	22.48
	6H	23.28	23.95	23.77	24.44	24.92	21.15	21.82	21.64	22.31	22.79
	8H	23.51	24.12	24.03	24.63	25.12	21.30	21.91	21.81	22.41	22.90
	12H	23.70	24.24	24.21	24.73	25.29	21.44	21.97	21.95	22.46	23.03
12H	4H	22.59	23.33	23.08	23.80	24.27	20.79	21.52	21.27	22.00	22.47
	6H	23.27	23.88	23.78	24.38	24.87	21.20	21.80	21.71	22.31	22.80
	8H	23.55	24.08	24.05	24.57	25.14	21.40	21.93	21.90	22.42	22.99