

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: P243729

Luminaire Tested: S125RDRP-H375D927-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243729
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-H375D927-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

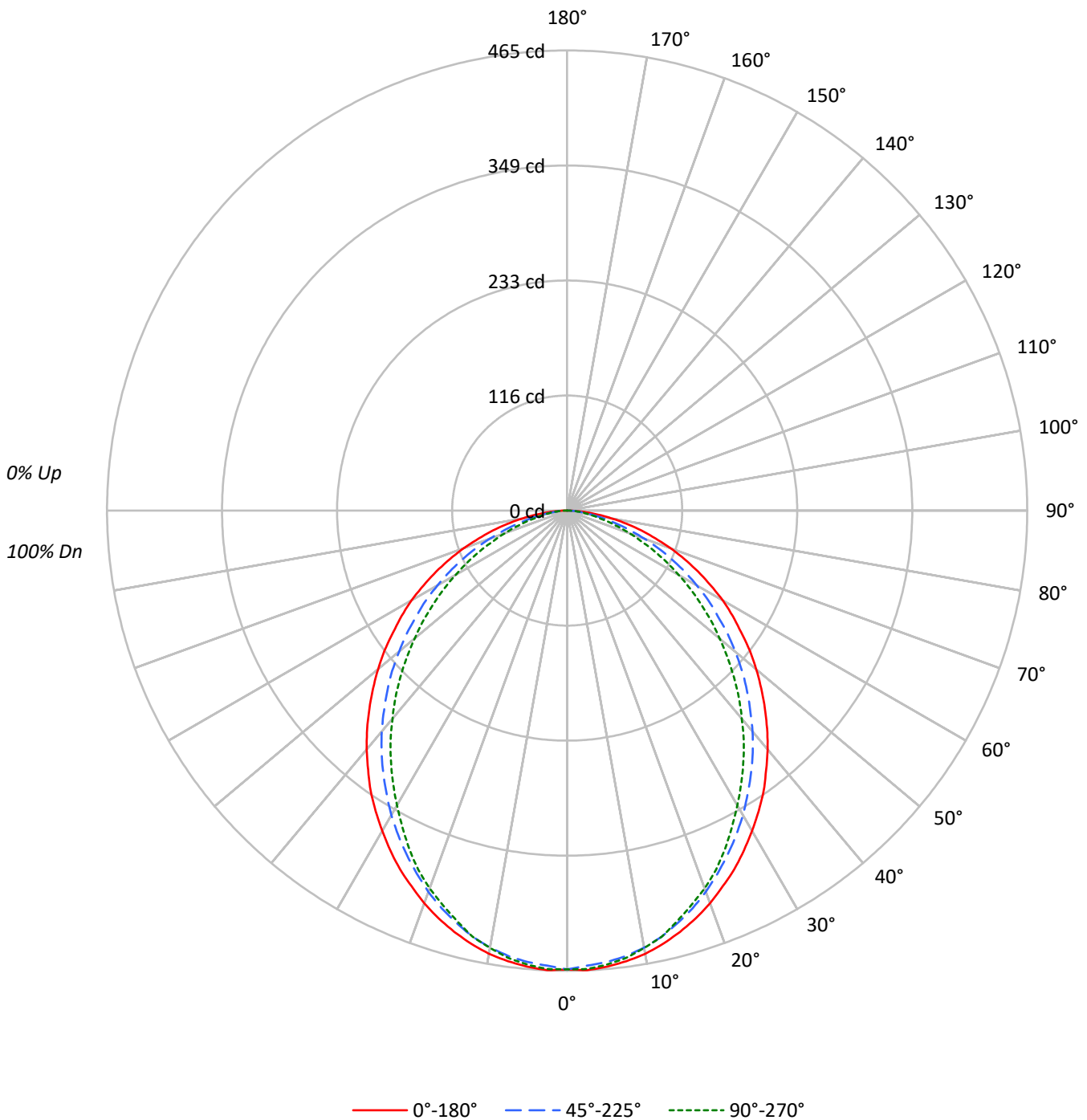
Lumens per Lamp: N/A
Luminaire Lumens: 1108.2 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 11.2
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: P243729

CATALOG NUMBER: S125RDRP-H375D927-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P243729

CATALOG NUMBER: S125RDRP-H375D927-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°	3295	3295	3295
5°	3300	3268	3286
10°	3282	3236	3238
15°	3243	3175	3160
20°	3193	3100	3072
25°	3136	3009	2960
30°	3067	2915	2822
35°	3004	2811	2693
40°	2923	2705	2548
45°	2840	2583	2396
50°	2758	2449	2226
55°	2659	2301	2047
60°	2579	2149	1852
65°	2454	1969	1640
70°	2315	1723	1399
75°	2131	1439	1140
80°	1875	1113	937
85°	1598	921	864

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2840 cd/sqm



TEST NUMBER: P243729

CATALOG NUMBER: S125RDRP-H375D927-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.7	3.9
10°-20°	122.3	11.0
20°-30°	178.0	16.1
30°-40°	203.8	18.4
40°-50°	199.5	18.0
50°-60°	168.4	15.2
60°-70°	117.9	10.6
70°-80°	59.9	5.4
80°-90°	14.7	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°	344.0	31.0
0°-40°	547.8	49.4
0°-60°	915.7	82.6
0°-90°	1108.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1108.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	464	464	464	464	464	
5°	463	462	458	461	461	44
15°	441	439	432	431	430	124
25°	400	395	384	380	377	184
35°	346	338	324	314	310	216
45°	283	273	257	243	238	218
55°	215	205	186	171	165	193
65°	146	135	117	102	98	145
75°	78	68	52	44	42	82
85°	20	13	11	11	11	22
90°	0	0	0	0	0	



TEST NUMBER: P243729

CATALOG NUMBER: S125RDRP-H375D927-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	463.6	463.6	463.6	463.6	463.6
2.5°	464.9	464.0	460.3	463.6	463.6
5°	462.6	461.6	458.0	461.0	460.6
7.5°	459.3	458.3	454.0	457.0	456.0
10°	454.7	453.3	448.4	450.0	448.7
12.5°	448.4	447.0	441.1	441.7	441.1
15°	440.7	439.1	431.5	431.1	429.5
17.5°	432.1	429.8	421.5	420.5	417.9
20°	422.2	419.2	409.9	407.9	406.2
22.5°	410.9	407.9	397.0	394.0	393.0
25°	399.9	395.3	383.7	379.7	377.4
27.5°	387.0	381.7	369.8	364.5	360.5
30°	373.7	367.8	355.2	348.2	343.9
32.5°	360.2	353.2	339.6	331.0	327.3
35°	346.2	337.9	324.0	314.4	310.4
37.5°	330.3	322.0	308.1	296.8	293.2
40°	315.1	306.4	291.5	279.2	274.6
42.5°	299.1	290.2	273.9	261.0	257.0
45°	282.6	273.3	257.0	243.4	238.4
47.5°	266.0	256.7	239.8	226.2	219.9
50°	249.4	239.4	221.5	207.6	201.3
52.5°	232.8	221.9	204.3	189.4	183.7
55°	214.6	205.3	185.7	170.8	165.2
57.5°	198.3	188.0	169.5	154.2	147.9
60°	181.4	170.1	151.2	136.3	130.3
62.5°	163.5	152.2	134.0	119.1	113.7
65°	145.9	134.6	117.1	102.5	97.5
67.5°	128.3	117.7	100.2	86.6	80.9
70°	111.4	100.5	82.9	70.6	67.3
72.5°	93.5	84.9	67.3	56.4	53.7
75°	77.6	68.0	52.4	43.8	41.5
77.5°	61.4	52.1	38.8	32.8	30.8
80°	45.8	37.8	27.2	23.5	22.9
82.5°	31.5	23.9	17.9	17.2	16.9
85°	19.6	12.6	11.3	10.6	10.6
87.5°	8.3	5.3	5.3	5.0	5.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P243729
 CATALOG NUMBER: S125RDRP-H375D927-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	15.57	17.15	15.93	17.46	17.77	14.06	15.64	14.42	15.95	16.26
	3H	17.33	18.75	17.71	19.08	19.44	15.34	16.76	15.71	17.09	17.45
	4H	17.99	19.32	18.38	19.67	20.05	15.73	17.06	16.12	17.41	17.79
	6H	18.46	19.69	18.87	20.06	20.45	15.96	17.20	16.37	17.56	17.95
	8H	18.60	19.78	19.03	20.17	20.57	16.04	17.21	16.46	17.60	18.00
	12H	18.70	19.83	19.13	20.21	20.64	16.09	17.22	16.52	17.60	18.03
4H	2H	15.97	17.30	16.37	17.65	18.03	14.74	16.08	15.14	16.43	16.80
	3H	17.93	19.04	18.34	19.44	19.84	16.21	17.32	16.62	17.72	18.12
	4H	18.71	19.71	19.14	20.13	20.57	16.67	17.68	17.11	18.09	18.53
	6H	19.31	20.18	19.76	20.62	21.08	16.99	17.87	17.45	18.31	18.76
	8H	19.49	20.31	19.95	20.75	21.22	17.10	17.91	17.56	18.36	18.82
	12H	19.63	20.36	20.11	20.83	21.30	17.18	17.91	17.66	18.39	18.86
8H	4H	18.83	19.65	19.29	20.09	20.56	16.98	17.80	17.44	18.24	18.71
	6H	19.51	20.18	20.00	20.67	21.15	17.38	18.05	17.87	18.54	19.02
	8H	19.74	20.35	20.26	20.86	21.35	17.53	18.14	18.04	18.64	19.13
	12H	19.93	20.47	20.44	20.96	21.52	17.67	18.20	18.17	18.69	19.26
12H	4H	18.82	19.56	19.30	20.03	20.50	17.02	17.75	17.50	18.23	18.70
	6H	19.50	20.11	20.01	20.61	21.10	17.42	18.03	17.94	18.54	19.03
	8H	19.78	20.31	20.28	20.80	21.37	17.62	18.16	18.13	18.65	19.21