

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: P242898

Luminaire Tested: S125RDRP-S375D940-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242898
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-S375D940-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

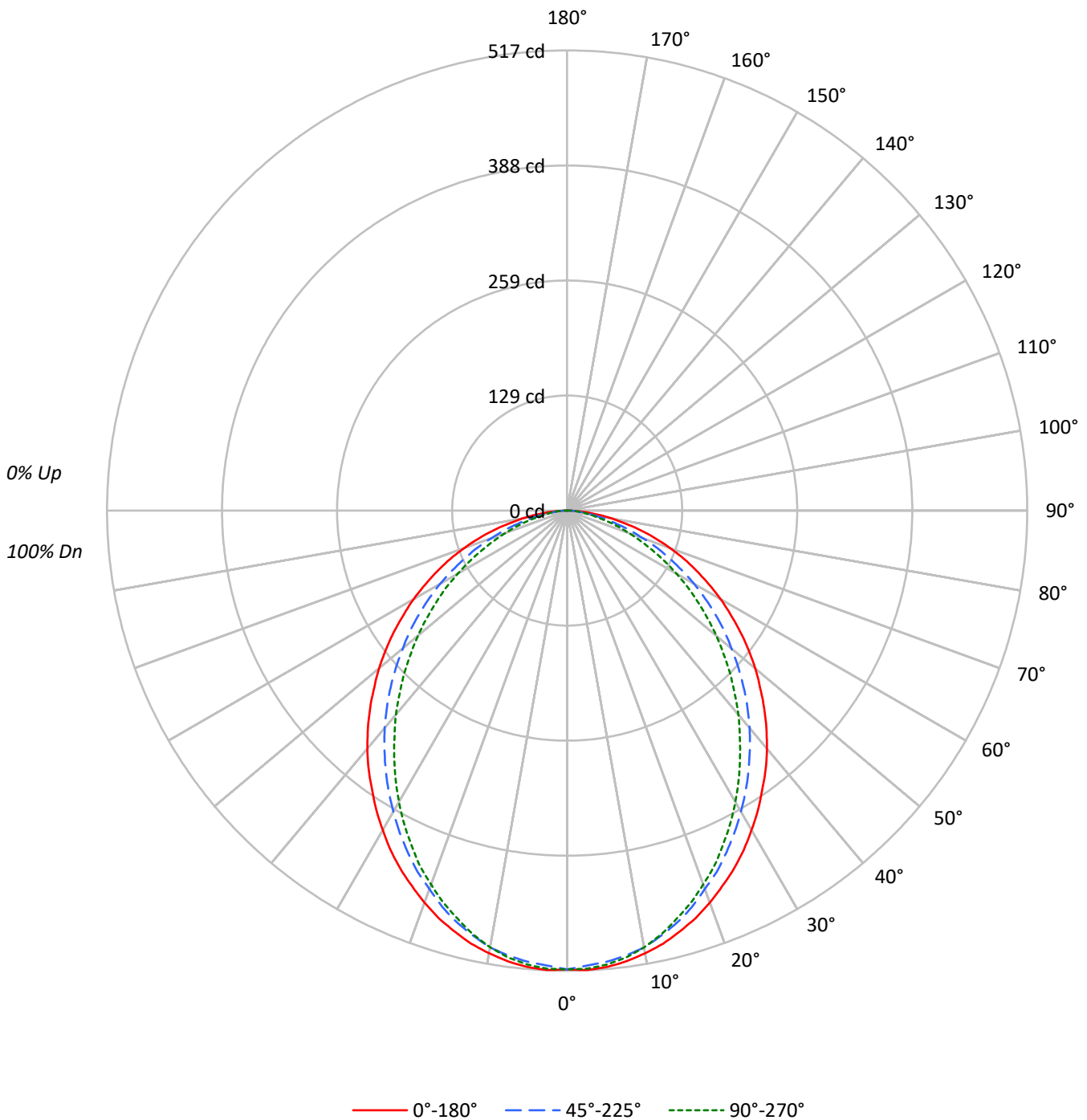
Lumens per Lamp: N/A
Luminaire Lumens: 1217.9 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 11.6
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

TEST NUMBER: P242898

CATALOG NUMBER: S125RDRP-S375D940-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P242898

CATALOG NUMBER: S125RDRP-S375D940-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	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°	3664	3664	3664
5°	3672	3631	3653
10°	3645	3597	3597
15°	3601	3524	3495
20°	3546	3422	3381
25°	3480	3322	3249
30°	3400	3205	3103
35°	3317	3084	2939
40°	3240	2959	2778
45°	3146	2817	2602
50°	3052	2665	2419
55°	2943	2518	2224
60°	2833	2341	2014
65°	2704	2134	1774
70°	2556	1876	1529
75°	2353	1582	1271
80°	2071	1244	1068
85°	1745	1019	954

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3146 cd/sqm



TEST NUMBER: P242898

CATALOG NUMBER: S125RDRP-S375D940-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.5	4.0
10°-20°	135.6	11.1
20°-30°	196.6	16.1
30°-40°	224.0	18.4
40°-50°	218.3	17.9
50°-60°	183.7	15.1
60°-70°	128.7	10.6
70°-80°	66.0	5.4
80°-90°	16.5	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°	380.7	31.3
0°-40°	604.7	49.6
0°-60°	1006.7	82.7
0°-90°	1217.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1217.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	515	513	509	513	512	49
15°	489	487	479	478	475	138
25°	444	438	424	418	414	204
35°	382	373	356	344	339	239
45°	313	302	280	265	259	241
55°	238	225	203	186	180	212
65°	161	148	127	111	106	159
75°	86	74	58	49	46	91
85°	21	14	12	12	12	25
90°	0	0	0	0	0	



TEST NUMBER: P242898

CATALOG NUMBER: S125RDRP-S375D940-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	515.5	515.5	515.5	515.5	515.5
2.5°	516.7	515.5	511.6	515.5	515.1
5°	514.7	513.2	508.9	512.8	512.0
7.5°	510.8	509.3	504.2	507.3	506.5
10°	505.0	503.8	498.4	499.5	498.4
12.5°	498.4	496.8	489.0	489.8	487.8
15°	489.4	487.1	478.9	478.5	475.0
17.5°	480.1	476.6	466.8	464.9	462.1
20°	468.8	464.9	452.4	450.5	447.0
22.5°	456.3	452.4	439.2	434.9	432.2
25°	443.8	438.0	423.6	418.5	414.3
27.5°	429.8	422.8	407.6	401.0	396.7
30°	414.3	406.9	390.5	381.6	378.1
32.5°	399.1	390.1	373.4	363.3	358.6
35°	382.3	373.0	355.5	344.2	338.7
37.5°	366.4	355.1	337.2	323.9	318.5
40°	349.2	337.6	318.9	304.1	299.4
42.5°	331.3	319.3	299.8	285.8	278.4
45°	313.0	301.7	280.3	264.8	258.9
47.5°	294.0	282.3	260.9	244.9	238.3
50°	276.0	263.2	241.0	224.7	218.8
52.5°	256.6	243.3	222.7	204.8	199.0
55°	237.5	225.0	203.2	185.7	179.5
57.5°	218.0	204.8	183.8	166.6	161.2
60°	199.3	185.7	164.7	147.6	141.7
62.5°	179.5	166.6	145.2	129.7	123.8
65°	160.8	147.6	126.9	111.4	105.5
67.5°	142.1	128.9	109.0	94.2	89.5
70°	123.0	109.8	90.3	78.3	73.6
72.5°	104.3	91.5	73.6	62.7	60.0
75°	85.7	74.0	57.6	49.1	46.3
77.5°	66.6	57.2	43.6	37.0	34.7
80°	50.6	41.3	30.4	26.9	26.1
82.5°	35.0	26.9	20.2	19.1	18.7
85°	21.4	14.4	12.5	12.1	11.7
87.5°	9.0	6.2	5.8	5.8	5.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P242898
 CATALOG NUMBER: S125RDRP-S375D940-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	15.85	17.43	16.22	17.74	18.05	14.28	15.86	14.65	16.17	16.49
	3H	17.63	19.05	18.01	19.38	19.74	15.60	17.01	15.97	17.34	17.70
	4H	18.30	19.63	18.70	19.98	20.36	16.01	17.34	16.41	17.69	18.06
	6H	18.77	20.00	19.18	20.37	20.76	16.26	17.50	16.67	17.86	18.25
	8H	18.92	20.09	19.34	20.48	20.88	16.34	17.52	16.77	17.91	18.31
	12H	19.01	20.14	19.44	20.52	20.95	16.40	17.53	16.83	17.91	18.34
4H	2H	16.24	17.58	16.64	17.92	18.30	14.97	16.30	15.37	16.65	17.03
	3H	18.22	19.34	18.63	19.73	20.13	16.47	17.58	16.88	17.98	18.38
	4H	19.01	20.01	19.44	20.43	20.86	16.97	17.97	17.40	18.38	18.82
	6H	19.60	20.48	20.06	20.92	21.37	17.31	18.18	17.77	18.62	19.08
	8H	19.80	20.61	20.26	21.05	21.52	17.42	18.24	17.88	18.68	19.15
	12H	19.93	20.66	20.42	21.14	21.61	17.51	18.24	17.99	18.71	19.18
8H	4H	19.13	19.95	19.60	20.39	20.86	17.28	18.10	17.74	18.54	19.01
	6H	19.81	20.49	20.31	20.97	21.45	17.71	18.38	18.20	18.87	19.35
	8H	20.06	20.66	20.57	21.17	21.66	17.87	18.47	18.38	18.98	19.47
	12H	20.25	20.79	20.76	21.28	21.84	18.01	18.54	18.51	19.03	19.60
12H	4H	19.13	19.86	19.61	20.33	20.80	17.32	18.05	17.80	18.53	19.00
	6H	19.80	20.41	20.32	20.92	21.41	17.76	18.36	18.27	18.87	19.36
	8H	20.09	20.63	20.60	21.12	21.68	17.96	18.50	18.47	18.99	19.55