

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: P242879

Luminaire Tested: S125RDRP-S375D835-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242879
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-S375D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

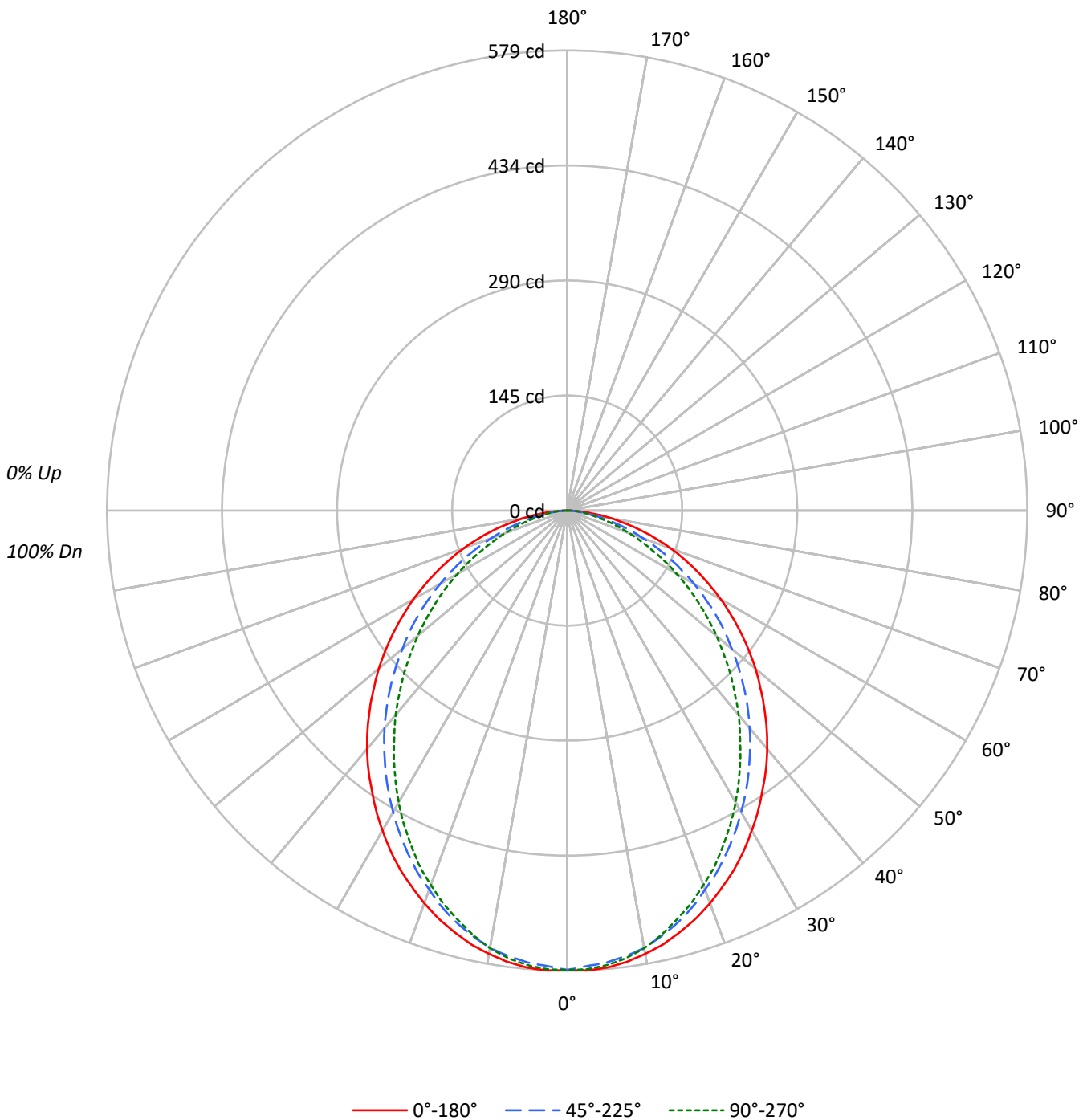
Lumens per Lamp: N/A
Luminaire Lumens: 1365.9 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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: P242879

CATALOG NUMBER: S125RDRP-S375D835-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P242879

CATALOG NUMBER: S125RDRP-S375D835-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°	4109	4109	4109
5°	4118	4072	4097
10°	4087	4034	4034
15°	4038	3951	3920
20°	3976	3838	3791
25°	3904	3725	3643
30°	3813	3594	3480
35°	3720	3458	3296
40°	3634	3318	3116
45°	3528	3160	2919
50°	3423	2989	2713
55°	3300	2824	2494
60°	3178	2625	2259
65°	3032	2393	1989
70°	2868	2105	1714
75°	2639	1774	1428
80°	2325	1396	1199
85°	1957	1142	1068

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3528 cd/sqm



TEST NUMBER: P242879

CATALOG NUMBER: S125RDRP-S375D835-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	4.0
10°-20°	152.0	11.1
20°-30°	220.5	16.1
30°-40°	251.2	18.4
40°-50°	244.8	17.9
50°-60°	206.0	15.1
60°-70°	144.4	10.6
70°-80°	74.0	5.4
80°-90°	18.5	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°	426.9	31.3
0°-40°	678.1	49.6
0°-60°	1129.0	82.7
0°-90°	1365.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1365.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	578	578	578	578	578	
5°	577	576	571	575	574	55
15°	549	546	537	537	533	155
25°	498	491	475	469	465	229
35°	429	418	399	386	380	269
45°	351	338	314	297	290	271
55°	266	252	228	208	201	238
65°	180	166	142	125	118	179
75°	96	83	65	55	52	102
85°	24	16	14	14	13	28
90°	0	0	0	0	0	

TEST NUMBER: P242879

CATALOG NUMBER: S125RDRP-S375D835-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	578.1	578.1	578.1	578.1	578.1
2.5°	579.4	578.1	573.7	578.1	577.7
5°	577.2	575.5	570.7	575.0	574.2
7.5°	572.8	571.1	565.4	568.9	568.0
10°	566.3	565.0	558.9	560.2	558.9
12.5°	558.9	557.1	548.4	549.3	547.1
15°	548.8	546.2	537.0	536.6	532.7
17.5°	538.4	534.4	523.5	521.3	518.3
20°	525.7	521.3	507.4	505.2	501.2
22.5°	511.7	507.4	492.5	487.7	484.7
25°	497.8	491.2	475.0	469.4	464.6
27.5°	482.0	474.2	457.1	449.7	444.9
30°	464.6	456.3	437.9	427.9	424.0
32.5°	447.5	437.5	418.7	407.4	402.1
35°	428.8	418.3	398.6	386.0	379.9
37.5°	410.9	398.2	378.1	363.3	357.2
40°	391.7	378.6	357.6	341.0	335.8
42.5°	371.6	358.0	336.2	320.5	312.2
45°	351.0	338.4	314.4	296.9	290.4
47.5°	329.7	316.6	292.5	274.6	267.2
50°	309.6	295.2	270.3	251.9	245.4
52.5°	287.7	272.9	249.7	229.7	223.1
55°	266.3	252.4	227.9	208.3	201.3
57.5°	244.5	229.7	206.1	186.9	180.8
60°	223.6	208.3	184.7	165.5	158.9
62.5°	201.3	186.9	162.9	145.4	138.8
65°	180.3	165.5	142.3	124.9	118.3
67.5°	159.4	144.5	122.3	105.7	100.4
70°	138.0	123.1	101.3	87.8	82.5
72.5°	117.0	102.6	82.5	70.3	67.2
75°	96.1	83.0	64.6	55.0	52.0
77.5°	74.7	64.2	48.9	41.5	38.9
80°	56.8	46.3	34.1	30.1	29.3
82.5°	39.3	30.1	22.7	21.4	21.0
85°	24.0	16.2	14.0	13.5	13.1
87.5°	10.0	7.0	6.5	6.5	6.1
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P242879
 CATALOG NUMBER: S125RDRP-S375D835-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	16.25	17.83	16.61	18.14	18.45	14.68	16.26	15.05	16.57	16.89
	3H	18.03	19.45	18.41	19.78	20.14	16.00	17.41	16.37	17.74	18.10
	4H	18.70	20.03	19.10	20.38	20.75	16.41	17.74	16.81	18.09	18.46
	6H	19.17	20.40	19.58	20.76	21.16	16.66	17.90	17.07	18.26	18.65
	8H	19.31	20.49	19.74	20.88	21.28	16.74	17.92	17.17	18.31	18.71
	12H	19.41	20.54	19.84	20.92	21.35	16.80	17.92	17.23	18.31	18.74
4H	2H	16.64	17.97	17.04	18.32	18.70	15.37	16.70	15.77	17.05	17.43
	3H	18.62	19.73	19.03	20.13	20.53	16.87	17.98	17.28	18.38	18.78
	4H	19.41	20.41	19.84	20.82	21.26	17.36	18.37	17.80	18.78	19.22
	6H	20.00	20.87	20.46	21.32	21.77	17.71	18.58	18.16	19.02	19.48
	8H	20.19	21.01	20.66	21.45	21.92	17.82	18.63	18.28	19.08	19.54
	12H	20.33	21.06	20.81	21.54	22.01	17.91	18.64	18.39	19.11	19.58
8H	4H	19.53	20.35	19.99	20.79	21.26	17.68	18.49	18.14	18.94	19.40
	6H	20.21	20.88	20.70	21.37	21.85	18.10	18.78	18.60	19.27	19.74
	8H	20.46	21.06	20.97	21.57	22.06	18.26	18.87	18.77	19.38	19.86
	12H	20.65	21.19	21.16	21.68	22.24	18.40	18.94	18.91	19.43	19.99
12H	4H	19.53	20.26	20.01	20.73	21.20	17.72	18.45	18.20	18.92	19.39
	6H	20.20	20.81	20.71	21.32	21.80	18.15	18.76	18.67	19.27	19.76
	8H	20.49	21.03	21.00	21.52	22.08	18.36	18.90	18.87	19.39	19.95