

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: P242771

Luminaire Tested: S125DRP-S375D830-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242771
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S375D830-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

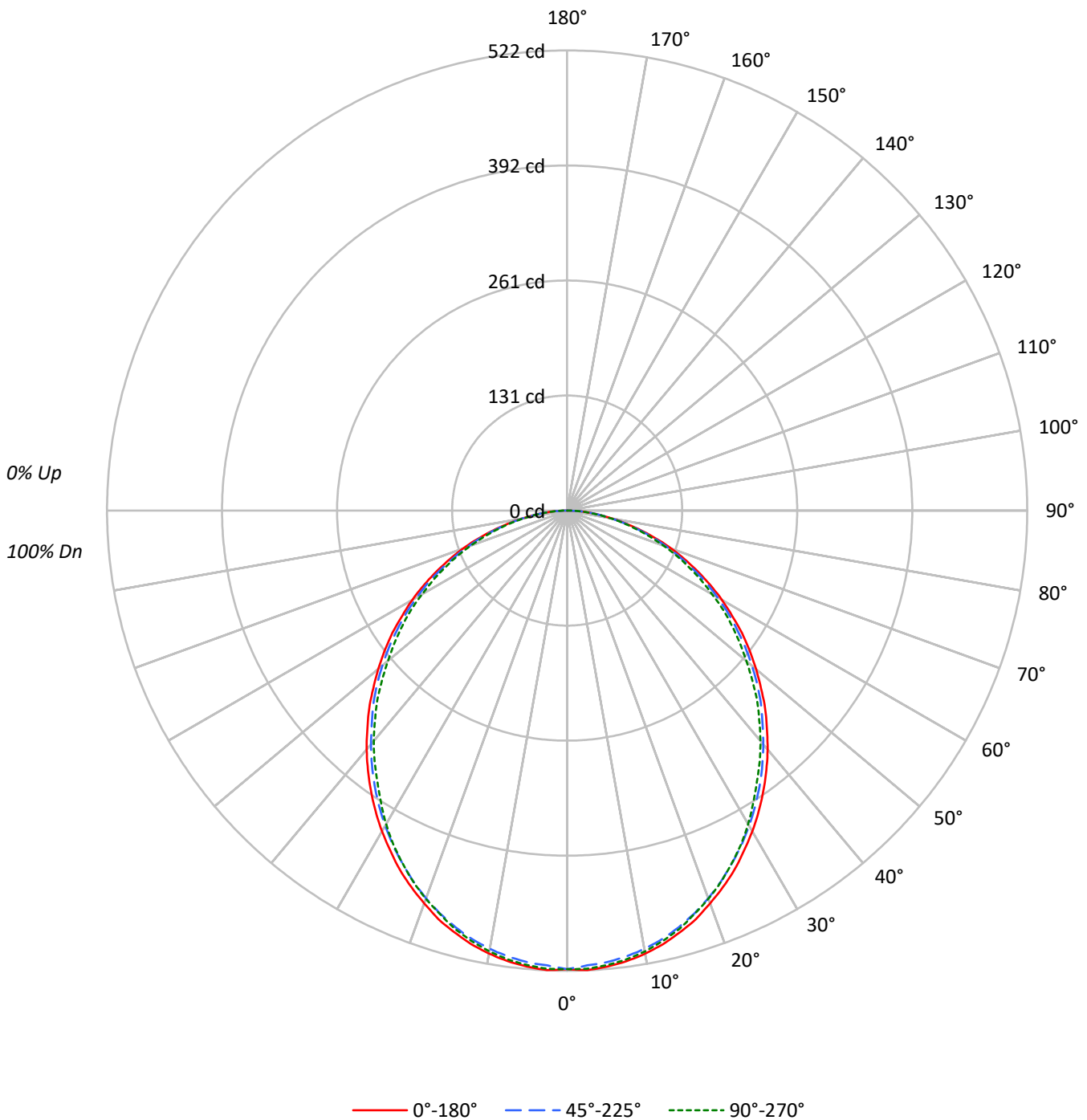
Lumens per Lamp: N/A
Luminaire Lumens: 1353.9 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (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: P242771

CATALOG NUMBER: S125DRP-S375D830-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P242771

CATALOG NUMBER: S125DRP-S375D830-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	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	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84																												
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70																												
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59																												
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																												
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44																												
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39																												
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34																												
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31																												
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28																												
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3697	3697	3697
5°	3706	3670	3694
10°	3683	3645	3665
15°	3643	3600	3616
20°	3586	3539	3545
25°	3524	3466	3463
30°	3449	3388	3371
35°	3367	3303	3256
40°	3283	3211	3166
45°	3193	3127	3065
50°	3094	3026	2935
55°	2999	2912	2830
60°	2884	2796	2697
65°	2748	2657	2568
70°	2616	2498	2413
75°	2384	2307	2227
80°	2124	2087	2038
85°	1843	1876	1778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3193 cd/sqm



TEST NUMBER: P242771

CATALOG NUMBER: S125DRP-S375D830-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	3.6
10°-20°	138.6	10.2
20°-30°	204.7	15.1
30°-40°	238.8	17.6
40°-50°	239.9	17.7
50°-60°	210.5	15.6
60°-70°	156.8	11.6
70°-80°	89.6	6.6
80°-90°	25.8	1.9
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°	392.4	29.0
0°-40°	631.2	46.6
0°-60°	1081.6	79.9
0°-90°	1353.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1353.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	520	520	520	520	520	
5°	519	518	514	518	518	49
15°	495	494	489	491	491	140
25°	449	447	442	443	442	207
35°	388	386	381	379	375	243
45°	318	316	311	306	305	245
55°	242	241	235	231	228	216
65°	163	163	158	154	153	162
75°	87	86	84	83	81	92
85°	23	23	23	23	22	26
90°	0	0	0	0	0	



TEST NUMBER: P242771

CATALOG NUMBER: S125DRP-S375D830-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	520.2	520.2	520.2	520.2	520.2
2.5°	521.8	520.6	516.5	520.6	520.2
5°	519.4	518.5	514.4	518.1	517.7
7.5°	515.7	514.8	510.3	514.0	513.6
10°	510.3	509.5	505.0	508.2	507.8
12.5°	503.7	502.1	498.0	500.4	500.4
15°	495.1	493.8	489.3	491.4	491.4
17.5°	486.0	484.0	479.4	481.9	479.9
20°	474.1	473.3	467.9	470.8	468.7
22.5°	462.2	460.5	455.6	457.2	456.0
25°	449.4	447.3	442.0	442.8	441.6
27.5°	434.6	433.3	428.0	428.4	427.2
30°	420.2	418.9	412.8	411.9	410.7
32.5°	404.5	402.5	397.1	395.5	393.0
35°	388.1	386.4	380.7	378.6	375.3
37.5°	371.2	369.1	363.8	360.9	358.9
40°	353.9	351.9	346.1	342.4	341.2
42.5°	335.4	333.8	328.0	324.7	322.6
45°	317.7	316.1	311.1	306.2	304.9
47.5°	298.4	298.8	292.6	287.7	284.8
50°	279.8	278.6	273.7	268.3	265.4
52.5°	260.9	260.1	254.7	250.2	246.9
55°	242.0	240.7	235.0	231.3	228.4
57.5°	221.8	221.4	216.5	211.5	210.3
60°	202.9	201.2	196.7	192.6	189.7
62.5°	183.1	181.9	178.2	173.7	171.6
65°	163.4	162.6	158.0	154.3	152.7
67.5°	144.0	142.4	139.1	135.8	135.0
70°	125.9	123.9	120.2	117.7	116.1
72.5°	106.2	104.9	102.9	100.0	98.4
75°	86.8	86.0	84.0	82.7	81.1
77.5°	68.7	68.3	67.1	66.3	65.0
80°	51.9	51.9	51.0	50.6	49.8
82.5°	37.0	36.2	36.2	35.4	35.4
85°	22.6	23.0	23.0	22.6	21.8
87.5°	11.1	11.1	10.7	10.7	9.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P242771
 CATALOG NUMBER: S125DRP-S375D830-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	15.89	17.51	16.26	17.82	18.14	15.56	17.18	15.93	17.50	17.81
	3H	17.66	19.12	18.04	19.45	19.81	17.30	18.76	17.67	19.09	19.45
	4H	18.32	19.70	18.72	20.04	20.42	17.94	19.32	18.34	19.67	20.04
	6H	18.80	20.07	19.21	20.44	20.83	18.43	19.71	18.84	20.07	20.46
	8H	18.95	20.17	19.38	20.56	20.96	18.59	19.81	19.02	20.20	20.60
	12H	19.06	20.23	19.49	20.61	21.04	18.70	19.87	19.13	20.25	20.68
4H	2H	16.47	17.85	16.87	18.20	18.57	16.21	17.59	16.61	17.94	18.31
	3H	18.47	19.62	18.88	20.02	20.42	18.16	19.32	18.57	19.71	20.11
	4H	19.25	20.30	19.68	20.71	21.15	18.94	19.98	19.37	20.39	20.83
	6H	19.86	20.77	20.31	21.21	21.67	19.55	20.47	20.01	20.91	21.36
	8H	20.07	20.92	20.53	21.36	21.83	19.76	20.62	20.22	21.06	21.52
	12H	20.22	20.98	20.70	21.46	21.93	19.92	20.68	20.40	21.16	21.63
8H	4H	19.54	20.39	20.00	20.84	21.30	19.26	20.12	19.72	20.56	21.02
	6H	20.27	20.98	20.76	21.47	21.94	20.00	20.71	20.49	21.20	21.67
	8H	20.55	21.18	21.06	21.69	22.18	20.28	20.92	20.79	21.43	21.91
	12H	20.78	21.34	21.28	21.83	22.39	20.52	21.08	21.02	21.57	22.13
12H	4H	19.57	20.34	20.05	20.81	21.28	19.30	20.07	19.78	20.54	21.01
	6H	20.32	20.96	20.83	21.47	21.95	20.06	20.70	20.57	21.21	21.69
	8H	20.66	21.22	21.16	21.71	22.27	20.40	20.97	20.91	21.46	22.02