

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P243047

Luminaire Tested: **S121RDR-H490D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243047
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-62)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121RDR-H490D830-X4F0-XX-UDD-F-W
Description: DEFINE 1 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1379.0 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.92 / 1.09
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

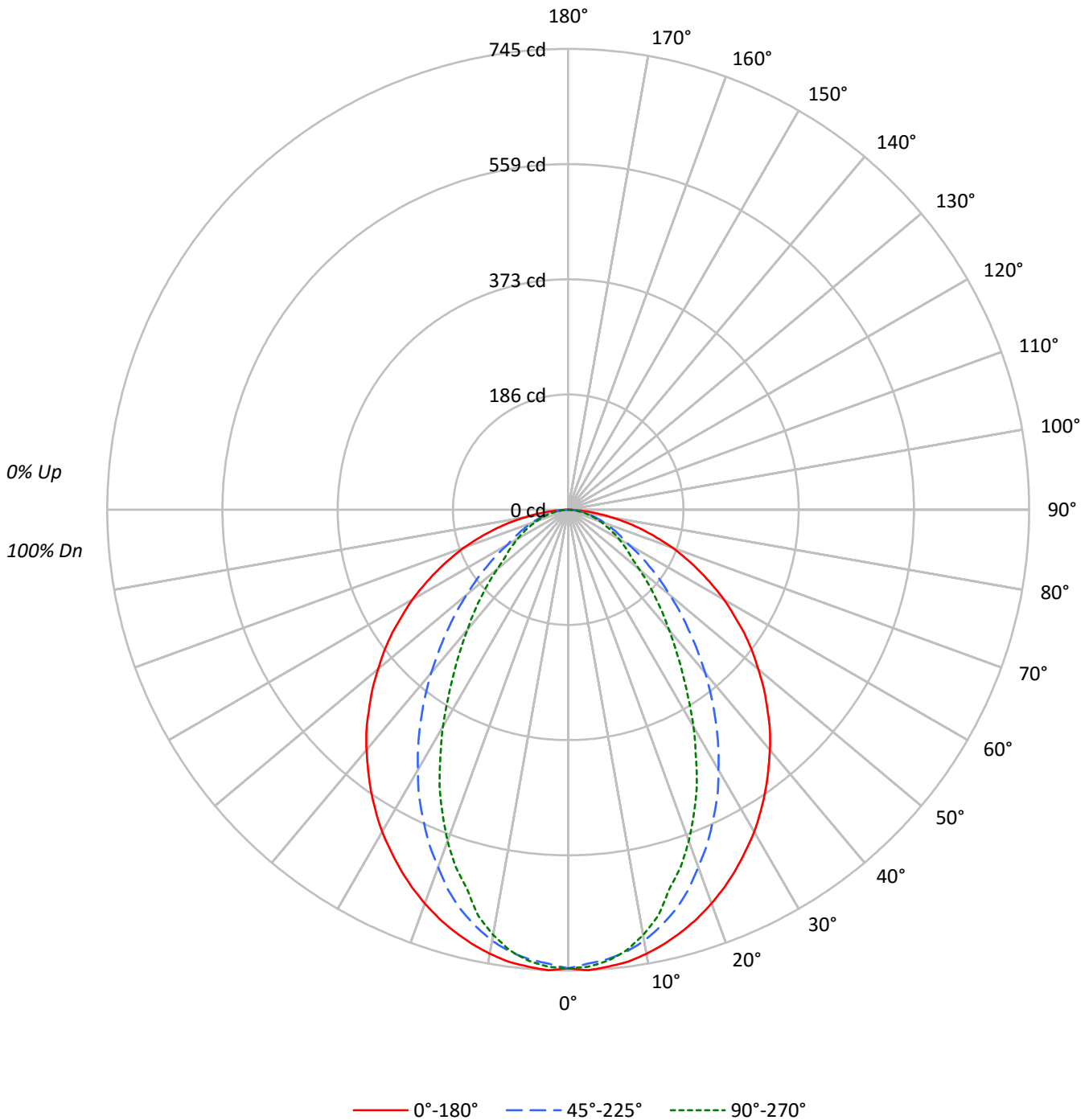
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243047

CATALOG NUMBER: S121RDR-H490D830-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P243047

CATALOG NUMBER: S121RDR-H490D830-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	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	67	60	54	65	59	54	64	58	53	62	57	52	50
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21970	21970	21970
5°	22054	21697	21775
10°	21930	21289	21004
15°	21684	20546	19429
20°	21359	19379	17970
25°	20976	18099	16085
30°	20576	16617	13846
35°	20093	15026	11636
40°	19614	13317	9793
45°	19062	11561	8293
50°	18480	9846	6896
55°	17920	8312	6137
60°	17239	6738	5624
65°	16392	6036	5153
70°	15516	5440	4739
75°	14173	4888	4316
80°	12115	4283	3856
85°	9383	3638	3196



TEST NUMBER: P243047

CATALOG NUMBER: S121RDR-H490D830-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	5.0
10°-20°	188.7	13.7
20°-30°	257.5	18.7
30°-40°	266.9	19.4
40°-50°	232.9	16.9
50°-60°	175.3	12.7
60°-70°	114.9	8.3
70°-80°	58.6	4.2
80°-90°	14.9	1.1
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°	515.6	37.4
0°-40°	782.5	56.7
0°-60°	1190.6	86.3
0°-90°	1379.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1379.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	742	742	742	742	742	
5°	742	738	730	734	732	70
15°	707	697	670	651	633	199
25°	642	615	554	507	492	296
35°	556	508	415	346	322	347
45°	455	389	276	214	198	351
55°	347	264	161	122	119	310
65°	234	146	86	76	74	232
75°	124	57	43	39	38	131
85°	28	11	11	9	9	33
90°	0	0	0	0	0	



TEST NUMBER: P243047

CATALOG NUMBER: S121RDR-H490D830-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	741.5	741.5	741.5	741.5	741.5
2.5°	745.3	742.1	734.6	740.9	739.6
5°	741.5	737.7	729.5	733.9	732.1
7.5°	737.1	732.1	720.7	722.6	718.9
10°	728.9	722.6	707.6	703.8	698.1
12.5°	718.9	711.9	690.0	681.2	672.4
15°	706.9	696.9	669.8	651.0	633.4
17.5°	693.1	680.5	644.7	618.3	605.1
20°	677.4	661.1	614.6	583.8	569.9
22.5°	660.4	639.7	586.3	547.3	531.0
25°	641.6	615.2	553.6	507.1	492.0
27.5°	621.5	591.3	522.2	468.8	446.8
30°	601.4	563.7	485.7	426.0	404.7
32.5°	578.7	536.0	451.2	385.2	361.3
35°	555.5	507.7	415.4	345.6	321.7
37.5°	531.0	479.5	379.5	309.2	285.9
40°	507.1	448.7	344.3	274.0	253.2
42.5°	482.6	417.9	309.2	243.2	225.6
45°	454.9	389.0	275.9	214.3	197.9
47.5°	429.2	357.5	245.7	188.5	173.4
50°	400.9	326.8	213.6	164.6	149.6
52.5°	374.5	295.3	187.3	139.5	130.1
55°	346.9	263.9	160.9	121.9	118.8
57.5°	317.3	233.1	137.6	109.3	105.6
60°	290.9	203.6	113.7	98.0	94.9
62.5°	261.4	174.1	98.7	87.3	84.2
65°	233.8	145.8	86.1	76.0	73.5
67.5°	206.1	120.0	74.1	66.0	63.5
70°	179.1	95.5	62.8	56.6	54.7
72.5°	149.6	72.3	52.8	47.8	46.5
75°	123.8	56.6	42.7	39.0	37.7
77.5°	96.8	42.7	33.3	30.8	30.2
80°	71.0	30.8	25.1	23.2	22.6
82.5°	48.4	20.7	17.6	16.3	15.7
85°	27.6	11.3	10.7	9.4	9.4
87.5°	10.7	4.4	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)