

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: P243117

Luminaire Tested: **S122DR-H675D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243117
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-48)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-H675D830-X4F0-XX-UDD-F-W
Description: DEFINE 2 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: 2429.7 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

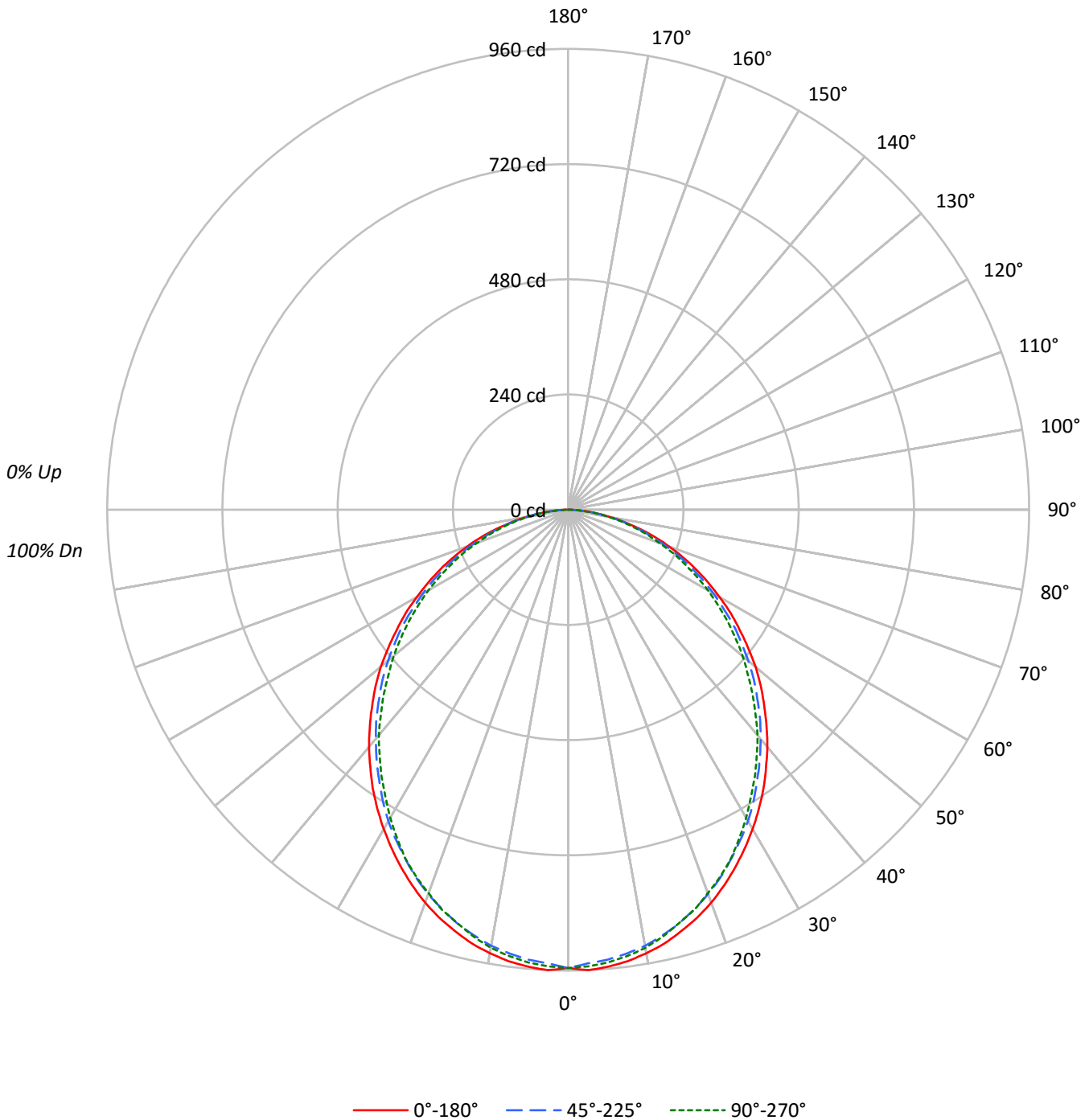
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243117

CATALOG NUMBER: S122DR-H675D830-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P243117

CATALOG NUMBER: S122DR-H675D830-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	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76		83	78	74		80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48		59	52	47		57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42		53	47	42		52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37		49	42	37		47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28		38	32	27		37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18187	18187	18187
5°	18273	17989	18105
10°	18144	17839	17924
15°	17927	17598	17580
20°	17659	17268	17232
25°	17293	16868	16849
30°	16898	16472	16298
35°	16493	15961	15756
40°	16040	15493	15252
45°	15551	15007	14627
50°	15098	14499	14055
55°	14466	13971	13443
60°	13848	13311	12808
65°	13246	12615	12056
70°	12447	11812	11222
75°	11334	10877	10362
80°	9850	9554	9170
85°	8458	7496	6928



TEST NUMBER: P243117

CATALOG NUMBER: S122DR-H675D830-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.9	3.7
10°-20°	253.1	10.4
20°-30°	372.1	15.3
30°-40°	432.0	17.8
40°-50°	431.4	17.8
50°-60°	375.8	15.5
60°-70°	277.9	11.4
70°-80°	156.6	6.4
80°-90°	40.9	1.7
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°	715.0	29.4
0°-40°	1147.1	47.2
0°-60°	1954.3	80.4
0°-90°	2429.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2429.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	955	955	955	955	955	
5°	956	951	941	949	947	91
15°	909	905	892	896	892	256
25°	823	816	803	802	802	379
35°	709	701	686	680	678	443
45°	577	571	557	548	543	446
55°	436	432	421	409	405	390
65°	294	290	280	271	268	291
75°	154	153	148	143	141	164
85°	39	37	34	33	32	44
90°	0	0	0	0	0	



TEST NUMBER: P243117

CATALOG NUMBER: S122DR-H675D830-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	954.8	954.8	954.8	954.8	954.8
2.5°	960.1	955.7	946.0	954.0	952.2
5°	955.7	951.3	940.8	948.7	946.9
7.5°	948.7	944.3	932.8	940.8	938.1
10°	938.1	932.8	922.3	927.6	926.7
12.5°	925.8	920.5	908.2	912.6	910.8
15°	909.1	904.7	892.4	895.9	891.5
17.5°	891.5	884.4	873.0	876.5	873.9
20°	871.2	864.2	851.9	853.6	850.1
22.5°	847.5	840.4	829.0	829.0	827.2
25°	822.8	815.8	802.6	801.7	801.7
27.5°	795.6	789.4	776.2	773.5	771.8
30°	768.3	763.0	748.9	743.6	741.0
32.5°	739.2	732.2	719.0	712.8	708.4
35°	709.3	701.4	686.4	680.3	677.6
37.5°	676.7	668.8	655.6	650.3	645.1
40°	645.1	638.0	623.1	615.1	613.4
42.5°	611.6	604.6	591.4	582.6	577.3
45°	577.3	571.1	557.1	548.3	543.0
47.5°	543.9	536.8	524.5	513.9	506.9
50°	509.5	502.5	489.3	477.0	474.3
52.5°	471.7	467.3	454.1	442.7	439.1
55°	435.6	432.1	420.7	409.2	404.8
57.5°	401.3	396.9	383.7	374.9	369.6
60°	363.5	360.8	349.4	339.7	336.2
62.5°	328.3	324.7	315.1	305.4	301.0
65°	293.9	289.5	279.9	271.1	267.5
67.5°	258.7	254.3	246.4	239.4	235.8
70°	223.5	220.0	212.1	205.9	201.5
72.5°	189.2	185.7	178.6	172.5	171.6
75°	154.0	153.1	147.8	142.6	140.8
77.5°	121.4	120.6	117.0	114.4	112.6
80°	89.8	89.8	87.1	84.5	83.6
82.5°	61.6	62.5	59.8	58.1	58.1
85°	38.7	37.0	34.3	32.6	31.7
87.5°	15.8	13.2	12.3	9.7	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)