

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: P243140

Luminaire Tested: **S122DR-H485D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243140
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-H485D940-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1641.3 lumens
Efficiency: N/A
Efficacy: 95.4 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

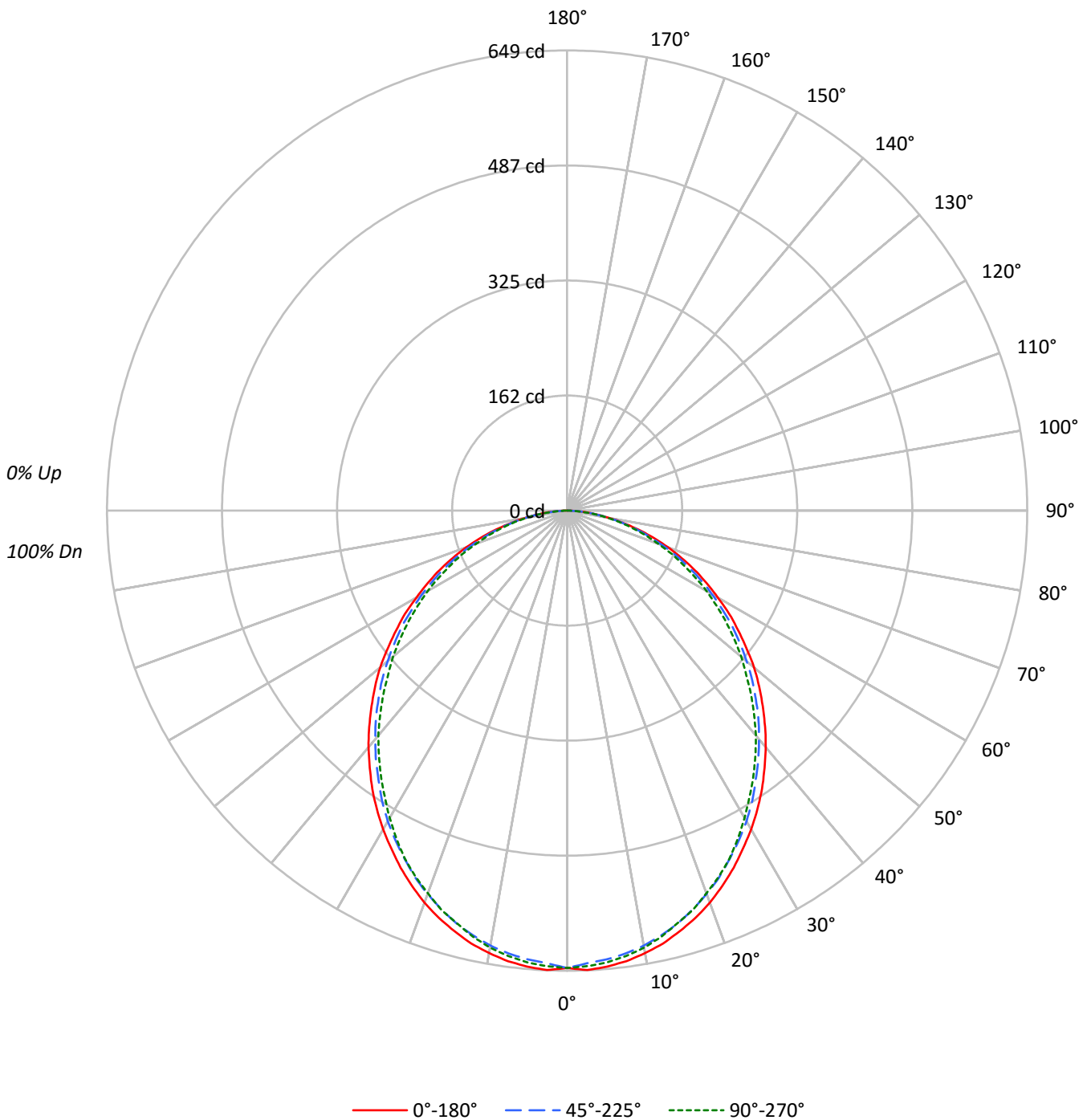
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243140

CATALOG NUMBER: S122DR-H485D940-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P243140

CATALOG NUMBER: S122DR-H485D940-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°	12286	12286	12286
5°	12344	12151	12231
10°	12257	12050	12108
15°	12110	11887	11875
20°	11929	11665	11641
25°	11681	11395	11383
30°	11415	11127	11010
35°	11143	10782	10645
40°	10836	10466	10304
45°	10506	10137	9881
50°	10200	9794	9494
55°	9773	9438	9083
60°	9352	8991	8651
65°	8951	8518	8144
70°	8409	7981	7580
75°	7654	7352	6999
80°	6647	6461	6198
85°	5726	5070	4677



TEST NUMBER: P243140

CATALOG NUMBER: S122DR-H485D940-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	3.7
10°-20°	171.0	10.4
20°-30°	251.4	15.3
30°-40°	291.8	17.8
40°-50°	291.5	17.8
50°-60°	253.8	15.5
60°-70°	187.7	11.4
70°-80°	105.8	6.4
80°-90°	27.6	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°	483.0	29.4
0°-40°	774.9	47.2
0°-60°	1320.2	80.4
0°-90°	1641.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1641.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	645	645	645	645	645	
5°	646	643	636	641	640	61
15°	614	611	603	605	602	173
25°	556	551	542	542	542	256
35°	479	474	464	460	458	299
45°	390	386	376	370	367	301
55°	294	292	284	276	274	264
65°	199	196	189	183	181	196
75°	104	103	100	96	95	111
85°	26	25	23	22	21	30
90°	0	0	0	0	0	



TEST NUMBER: P243140

CATALOG NUMBER: S122DR-H485D940-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	645.0	645.0	645.0	645.0	645.0
2.5°	648.6	645.6	639.1	644.4	643.2
5°	645.6	642.6	635.5	640.9	639.7
7.5°	640.9	637.9	630.2	635.5	633.7
10°	633.7	630.2	623.0	626.6	626.0
12.5°	625.4	621.8	613.5	616.5	615.3
15°	614.1	611.1	602.8	605.2	602.2
17.5°	602.2	597.5	589.7	592.1	590.3
20°	588.5	583.8	575.5	576.7	574.3
22.5°	572.5	567.7	560.0	560.0	558.8
25°	555.8	551.1	542.2	541.6	541.6
27.5°	537.4	533.3	524.3	522.6	521.4
30°	519.0	515.4	505.9	502.3	500.6
32.5°	499.4	494.6	485.7	481.5	478.6
35°	479.2	473.8	463.7	459.5	457.8
37.5°	457.2	451.8	442.9	439.3	435.8
40°	435.8	431.0	420.9	415.5	414.4
42.5°	413.2	408.4	399.5	393.6	390.0
45°	390.0	385.8	376.3	370.4	366.8
47.5°	367.4	362.6	354.3	347.2	342.4
50°	344.2	339.5	330.5	322.2	320.4
52.5°	318.6	315.7	306.8	299.0	296.6
55°	294.3	291.9	284.2	276.4	273.5
57.5°	271.1	268.1	259.2	253.3	249.7
60°	245.5	243.7	236.0	229.5	227.1
62.5°	221.7	219.4	212.8	206.3	203.3
65°	198.6	195.6	189.0	183.1	180.7
67.5°	174.8	171.8	166.5	161.7	159.3
70°	151.0	148.6	143.3	139.1	136.1
72.5°	127.8	125.4	120.7	116.5	115.9
75°	104.0	103.4	99.9	96.3	95.1
77.5°	82.0	81.4	79.1	77.3	76.1
80°	60.6	60.6	58.9	57.1	56.5
82.5°	41.6	42.2	40.4	39.2	39.2
85°	26.2	25.0	23.2	22.0	21.4
87.5°	10.7	8.9	8.3	6.5	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)