

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: P243287

Luminaire Tested: **S123DR-H340D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243287
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-49)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-H340D830-X4F0-XX-UDD-F-W
Description: DEFINE 3 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: 1266.1 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

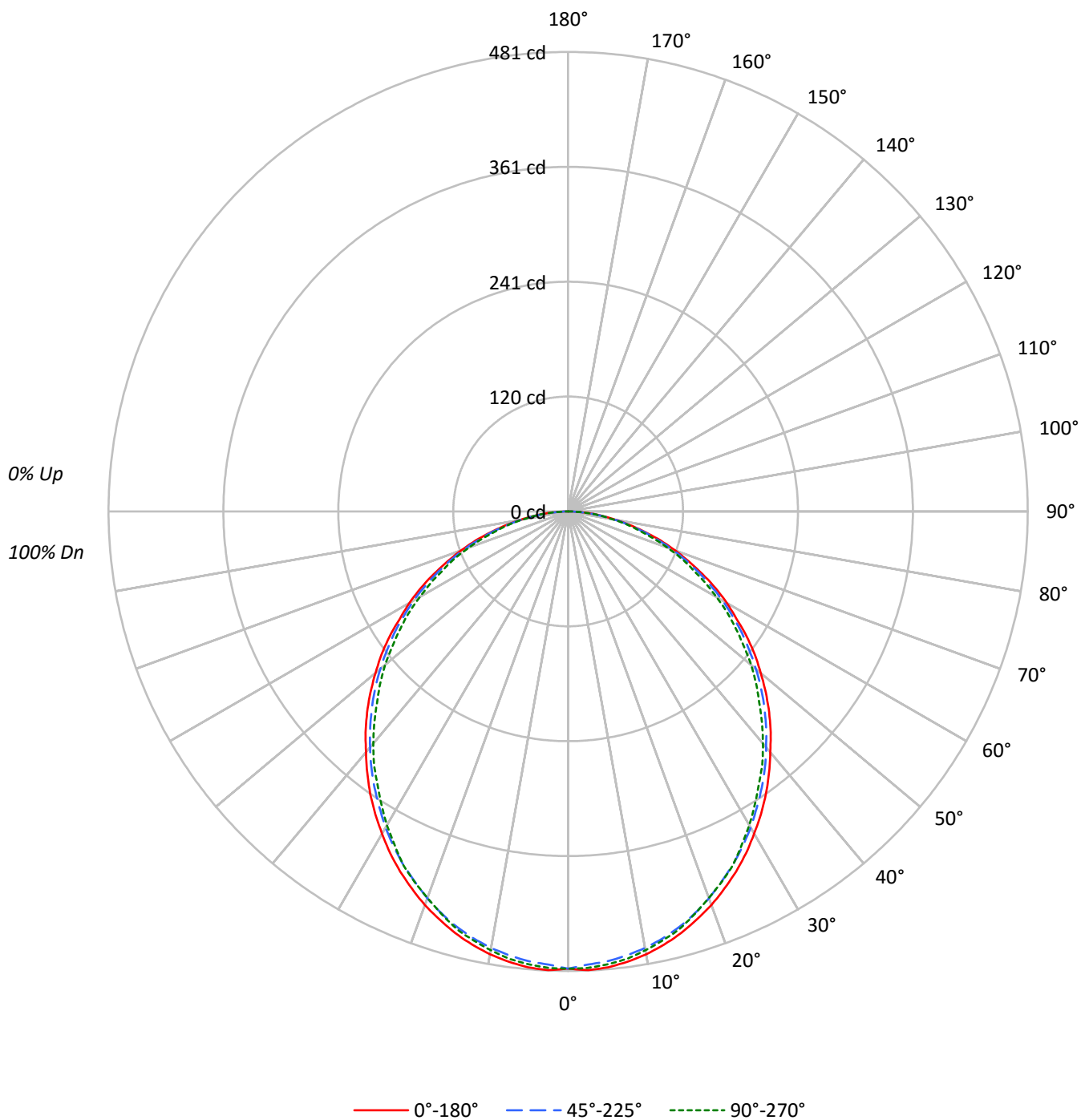
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243287

CATALOG NUMBER: S123DR-H340D830-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot



TEST NUMBER: P243287

CATALOG NUMBER: S123DR-H340D830-X4F0-XX-UDD-F-W

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	109	104	100	96	106	102	98	94		97	94	91			94	91	89			90
2	99	91	84	78	96	89	83	77		85	80	76			82	78	74			79
3	90	80	72	65	88	78	71	65		75	69	64			73	67	62			70
4	83	71	62	55	80	70	61	55		67	60	54			65	59	54			63
5	76	63	54	48	74	62	54	48		60	53	47			58	52	47			56
6	70	57	48	42	69	56	48	42		54	47	41			53	46	41			51
7	65	52	43	37	64	51	43	37		50	42	37			48	41	36			47
8	61	47	39	33	59	47	39	33		45	38	33			44	37	33			43
9	57	44	35	30	56	43	35	30		42	35	30			41	34	29			40
10	53	40	32	27	52	40	32	27		39	32	27			38	31	27			37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5801	5801	5801
5°	5828	5752	5791
10°	5793	5711	5741
15°	5734	5649	5675
20°	5655	5558	5553
25°	5562	5457	5462
30°	5450	5347	5307
35°	5342	5225	5149
40°	5207	5101	5019
45°	5100	4978	4849
50°	4963	4837	4718
55°	4820	4694	4537
60°	4650	4524	4342
65°	4448	4311	4130
70°	4224	4083	3916
75°	3920	3808	3601
80°	3525	3441	3330
85°	3296	3129	3018

TEST NUMBER: P243287

CATALOG NUMBER: S123DR-H340D830-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	3.6
10°-20°	127.7	10.1
20°-30°	189.1	14.9
30°-40°	221.7	17.5
40°-50°	224.1	17.7
50°-60°	198.2	15.7
60°-70°	148.9	11.8
70°-80°	85.8	6.8
80°-90°	25.4	2.0
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°	361.9	28.6
0°-40°	583.6	46.1
0°-60°	1006.0	79.5
0°-90°	1266.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1266.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	479	477	473	477	476	45
15°	457	455	450	453	452	129
25°	416	413	408	410	408	191
35°	361	358	353	352	348	226
45°	298	295	290	286	283	229
55°	228	226	222	218	215	204
65°	155	154	150	146	144	154
75°	84	83	81	79	77	89
85°	24	23	22	22	22	27
90°	0	0	0	0	0	

TEST NUMBER: P243287

CATALOG NUMBER: S123DR-H340D830-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	478.6	478.6	478.6	478.6	478.6
2.5°	480.6	479.0	474.7	479.0	478.2
5°	479.0	477.0	472.7	476.7	475.9
7.5°	475.5	473.5	468.8	473.1	472.3
10°	470.7	468.8	464.0	467.6	466.4
12.5°	464.4	462.4	457.7	460.5	459.7
15°	456.9	454.6	450.2	453.4	452.2
17.5°	447.8	445.9	441.1	445.1	441.5
20°	438.4	436.4	430.9	434.4	430.5
22.5°	427.3	425.0	419.4	421.8	419.8
25°	415.9	412.7	408.0	410.0	408.4
27.5°	403.3	400.1	395.4	396.2	393.4
30°	389.4	386.7	382.0	382.7	379.2
32.5°	375.6	373.3	367.4	367.4	363.8
35°	361.0	357.9	353.1	352.0	348.0
37.5°	345.3	342.5	338.2	336.2	333.8
40°	329.1	327.5	322.4	320.0	317.2
42.5°	313.7	310.9	306.6	303.4	300.3
45°	297.5	295.1	290.4	286.5	282.9
47.5°	280.5	278.6	273.8	269.5	266.7
50°	263.2	261.6	256.5	251.7	250.2
52.5°	246.2	244.2	239.1	234.8	231.6
55°	228.1	226.5	222.1	217.8	214.7
57.5°	208.7	208.7	204.0	200.1	197.7
60°	191.8	189.8	186.6	182.3	179.1
62.5°	174.0	172.8	168.5	164.1	161.8
65°	155.1	153.9	150.3	146.4	144.0
67.5°	136.5	136.1	133.0	129.8	128.2
70°	119.2	118.4	115.2	112.1	110.5
72.5°	101.4	100.6	97.9	95.1	93.1
75°	83.7	82.9	81.3	78.9	76.9
77.5°	66.3	66.3	64.3	63.5	62.7
80°	50.5	50.1	49.3	48.5	47.7
82.5°	36.3	35.9	35.1	34.7	34.7
85°	23.7	23.3	22.5	22.1	21.7
87.5°	12.2	11.4	11.0	10.3	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)