

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: P243311

Luminaire Tested: **S123DR-H340D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243311
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-H340D940-X4F0-XX-UDD-F-W
Description: DEFINE 3 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: 1197.9 lumens
Efficiency: N/A
Efficacy: 107.0 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

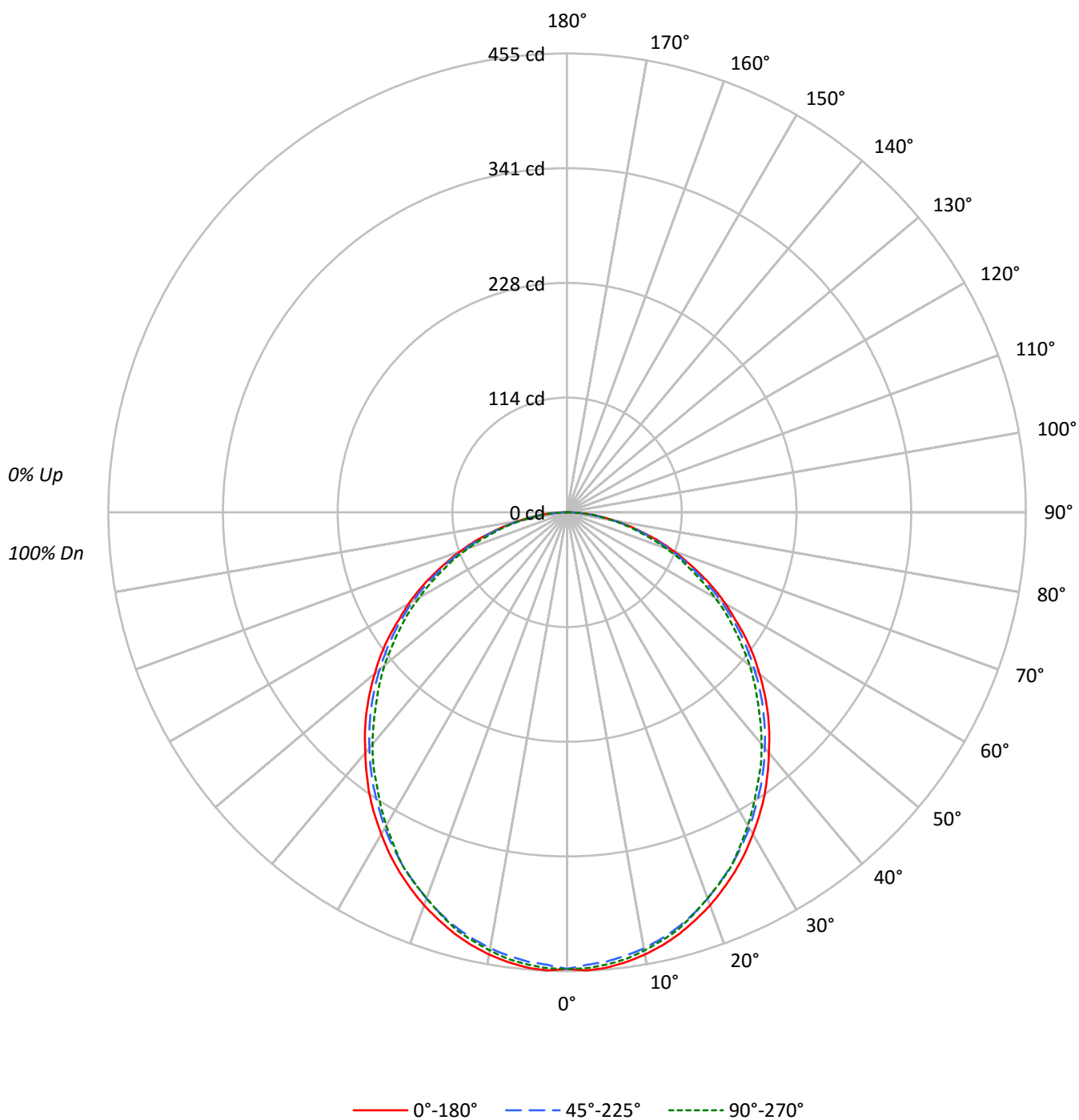
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



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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°	5488	5488	5488
5°	5514	5441	5478
10°	5481	5403	5430
15°	5425	5345	5368
20°	5349	5258	5254
25°	5263	5162	5168
30°	5156	5058	5021
35°	5055	4944	4871
40°	4926	4826	4749
45°	4825	4709	4589
50°	4695	4575	4464
55°	4560	4442	4292
60°	4398	4281	4109
65°	4208	4078	3909
70°	3994	3863	3703
75°	3704	3601	3409
80°	3337	3260	3155
85°	3115	2962	2851

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.7	3.6
10°-20°	120.8	10.1
20°-30°	178.9	14.9
30°-40°	209.8	17.5
40°-50°	212.1	17.7
50°-60°	187.6	15.7
60°-70°	140.9	11.8
70°-80°	81.2	6.8
80°-90°	24.1	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°	342.4	28.6
0°-40°	552.1	46.1
0°-60°	951.8	79.5
0°-90°	1197.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1197.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	453	453	453	453	453	
5°	453	451	447	451	450	43
15°	432	430	426	429	428	122
25°	394	390	386	388	386	181
35°	342	339	334	333	329	213
45°	282	279	275	271	268	217
55°	216	214	210	206	203	193
65°	147	146	142	138	136	145
75°	79	78	77	75	73	84
85°	22	22	21	21	20	25
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	452.8	452.8	452.8	452.8	452.8
2.5°	454.7	453.2	449.1	453.2	452.4
5°	453.2	451.3	447.2	450.9	450.2
7.5°	449.8	448.0	443.5	447.6	446.8
10°	445.3	443.5	439.0	442.4	441.2
12.5°	439.4	437.5	433.0	435.6	434.9
15°	432.3	430.0	425.9	428.9	427.8
17.5°	423.7	421.8	417.3	421.1	417.7
20°	414.7	412.9	407.6	411.0	407.3
22.5°	404.3	402.0	396.8	399.1	397.2
25°	393.5	390.5	386.0	387.9	386.4
27.5°	381.5	378.5	374.0	374.8	372.2
30°	368.4	365.8	361.4	362.1	358.7
32.5°	355.4	353.1	347.5	347.5	344.2
35°	341.6	338.6	334.1	333.0	329.2
37.5°	326.6	324.0	319.9	318.1	315.8
40°	311.3	309.8	305.0	302.7	300.1
42.5°	296.8	294.2	290.1	287.1	284.1
45°	281.5	279.2	274.7	271.0	267.7
47.5°	265.4	263.5	259.1	255.0	252.3
50°	249.0	247.5	242.6	238.2	236.7
52.5°	232.9	231.1	226.2	222.1	219.1
55°	215.8	214.3	210.2	206.1	203.1
57.5°	197.5	197.5	193.0	189.3	187.0
60°	181.4	179.6	176.6	172.5	169.5
62.5°	164.6	163.5	159.4	155.3	153.1
65°	146.7	145.6	142.2	138.5	136.3
67.5°	129.2	128.8	125.8	122.8	121.3
70°	112.7	112.0	109.0	106.0	104.5
72.5°	95.9	95.2	92.6	90.0	88.1
75°	79.1	78.4	76.9	74.7	72.8
77.5°	62.7	62.7	60.8	60.1	59.4
80°	47.8	47.4	46.7	45.9	45.2
82.5°	34.3	34.0	33.2	32.9	32.9
85°	22.4	22.0	21.3	20.9	20.5
87.5°	11.6	10.8	10.5	9.7	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)