

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: P242967

Luminaire Tested: **S121DR-H305D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242967
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-47)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121DR-H305D940-X4F0-XX-UDD-F-W
Description: DEFINE 1 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: 1021.9 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

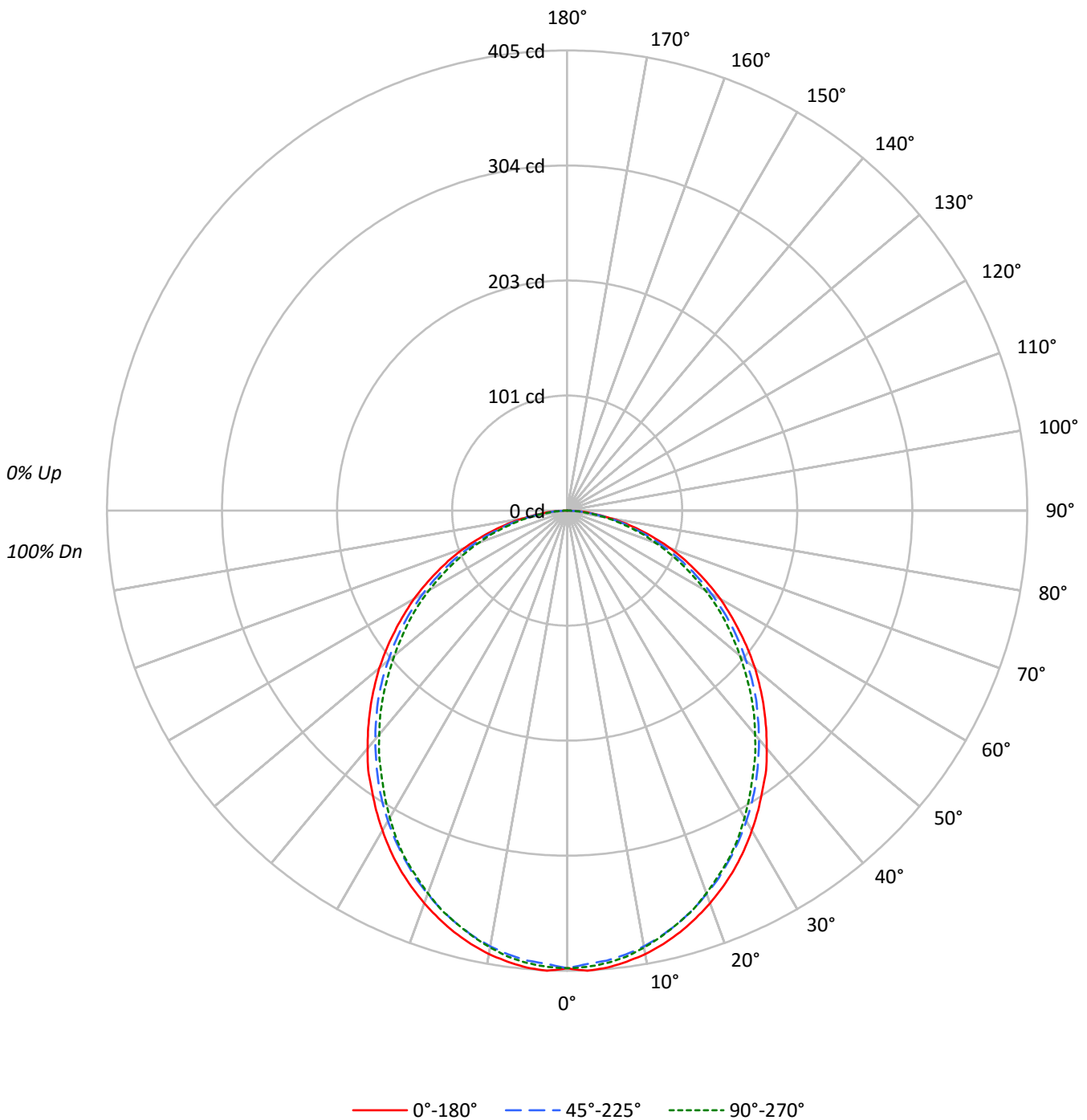
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	97	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	75	80	76	73	71
3	91	80	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	31	56	44	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°	11935	11935	11935
5°	12013	11826	11891
10°	11926	11716	11749
15°	11782	11543	11543
20°	11594	11323	11301
25°	11387	11070	11034
30°	11123	10791	10678
35°	10844	10493	10302
40°	10571	10165	9948
45°	10262	9856	9575
50°	9947	9482	9155
55°	9567	9123	8777
60°	9227	8693	8320
65°	8771	8217	7775
70°	8308	7632	7147
75°	7601	6926	6491
80°	6620	6109	5665
85°	5711	4691	3944



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	3.7
10°-20°	106.8	10.5
20°-30°	157.0	15.4
30°-40°	182.2	17.8
40°-50°	181.7	17.8
50°-60°	158.2	15.5
60°-70°	116.5	11.4
70°-80°	64.9	6.3
80°-90°	16.7	1.6
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°	301.8	29.5
0°-40°	484.0	47.4
0°-60°	823.9	80.6
0°-90°	1021.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1021.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	403	403	403	403	403	
5°	404	402	398	400	400	38
15°	384	382	376	378	376	108
25°	348	344	339	339	338	160
35°	300	296	290	287	285	188
45°	245	241	235	230	228	189
55°	185	182	177	172	170	166
65°	125	122	117	112	111	124
75°	66	64	60	58	57	70
85°	17	16	14	12	12	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	402.8	402.8	402.8	402.8	402.8
2.5°	405.4	403.2	399.4	402.8	402.0
5°	403.9	401.7	397.6	400.5	399.8
7.5°	400.5	398.7	394.2	396.8	396.1
10°	396.4	394.2	389.4	391.6	390.5
12.5°	390.8	389.0	383.4	385.2	383.8
15°	384.1	381.9	376.3	377.8	376.3
17.5°	376.3	374.0	368.1	369.2	368.4
20°	367.7	364.7	359.1	359.9	358.4
22.5°	358.4	355.0	349.4	349.4	347.9
25°	348.3	344.2	338.6	338.6	337.5
27.5°	337.1	333.4	327.4	326.6	325.5
30°	325.1	321.4	315.4	313.9	312.1
32.5°	312.8	308.7	303.1	300.5	298.6
35°	299.8	296.0	290.1	286.7	284.8
37.5°	287.8	282.6	276.2	273.3	271.8
40°	273.3	268.8	262.8	258.7	257.2
42.5°	259.1	255.0	248.6	244.5	243.4
45°	244.9	240.8	235.2	230.3	228.5
47.5°	230.3	226.2	220.6	215.8	213.2
50°	215.8	211.7	205.7	200.8	198.6
52.5°	200.5	197.5	191.1	186.6	183.7
55°	185.2	181.8	176.6	171.7	169.9
57.5°	170.2	167.2	161.6	156.4	155.3
60°	155.7	152.7	146.7	142.2	140.4
62.5°	140.4	137.4	131.8	127.3	125.4
65°	125.1	122.4	117.2	112.4	110.9
67.5°	110.9	107.5	102.7	98.2	96.3
70°	95.9	92.2	88.1	84.4	82.5
72.5°	81.0	78.0	74.7	70.9	70.2
75°	66.4	63.5	60.5	57.9	56.7
77.5°	52.6	50.4	48.2	45.5	44.8
80°	38.8	37.3	35.8	34.0	33.2
82.5°	27.3	26.1	23.9	22.4	21.7
85°	16.8	15.7	13.8	11.9	11.6
87.5°	7.8	6.3	4.9	4.1	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)