

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: P242205

Luminaire Tested: **S121RDR-S305D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242205
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-23)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121RDR-S305D935-X4F0-XX-UDD-F-W
Description: DEFINE 1 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 840.7 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.92 / 1.09
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

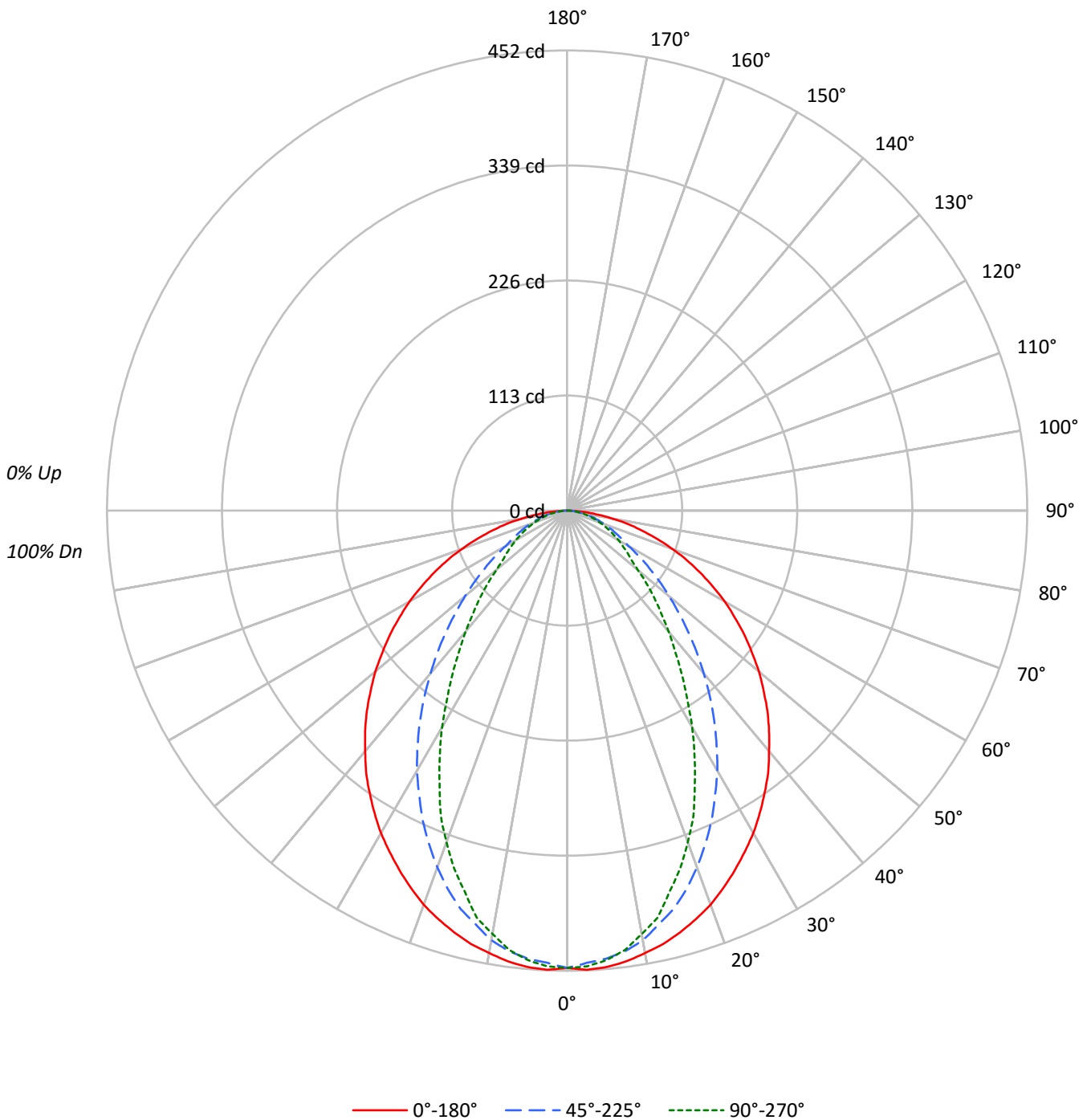
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33
10	58	45	38	33	56	45	37	33	44	37	33	43	37	32	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13310	13310	13310
5°	13384	13137	13182
10°	13277	12895	12703
15°	13156	12420	11902
20°	12991	11758	10929
25°	12744	10975	9697
30°	12515	10096	8399
35°	12237	9112	7111
40°	11936	8068	5991
45°	11657	7040	5058
50°	11335	6029	4176
55°	10972	5088	3730
60°	10602	4119	3455
65°	10096	3716	3190
70°	9512	3353	2928
75°	8735	3057	2713
80°	7627	2696	2440
85°	6255	2312	2040



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	5.0
10°-20°	114.4	13.6
20°-30°	156.1	18.6
30°-40°	162.3	19.3
40°-50°	141.8	16.9
50°-60°	107.2	12.7
60°-70°	70.8	8.4
70°-80°	36.5	4.3
80°-90°	9.7	1.2
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°	312.6	37.2
0°-40°	474.8	56.5
0°-60°	723.8	86.1
0°-90°	840.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	449	449	449	449	449	
5°	450	447	442	445	443	43
15°	429	422	405	394	388	121
25°	390	374	336	308	297	180
35°	338	308	252	210	197	212
45°	278	236	168	130	121	214
55°	212	161	98	75	72	190
65°	144	90	53	47	46	143
75°	76	35	27	24	24	81
85°	18	8	7	6	6	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	449.2	449.2	449.2	449.2	449.2
2.5°	451.5	449.2	444.7	448.9	448.1
5°	450.0	447.4	441.7	445.1	443.2
7.5°	446.6	443.6	436.5	437.6	435.3
10°	441.3	438.0	428.6	426.7	422.2
12.5°	436.1	430.8	416.2	412.4	409.8
15°	428.9	422.5	404.9	394.4	388.0
17.5°	420.7	412.0	389.8	375.6	368.8
20°	412.0	400.7	372.9	353.4	346.6
22.5°	401.1	388.0	354.5	331.2	324.4
25°	389.8	374.4	335.7	307.9	296.6
27.5°	377.8	359.0	314.7	283.5	271.0
30°	365.8	342.9	295.1	257.5	245.5
32.5°	352.2	326.7	273.3	233.8	219.5
35°	338.3	308.3	251.9	210.5	196.6
37.5°	324.4	291.3	230.4	188.7	174.1
40°	308.6	273.7	208.6	165.8	154.9
42.5°	293.6	255.3	188.0	148.1	136.5
45°	278.2	236.5	168.0	130.4	120.7
47.5°	261.6	218.0	148.5	115.0	105.3
50°	245.9	198.5	130.8	100.0	90.6
52.5°	228.6	180.1	114.3	84.6	79.3
55°	212.4	161.3	98.5	74.8	72.2
57.5°	195.1	143.2	83.8	67.7	64.7
60°	178.9	125.2	69.5	60.1	58.3
62.5°	160.9	107.9	60.5	53.4	51.5
65°	144.0	89.8	53.0	46.6	45.5
67.5°	127.1	74.4	45.9	40.6	39.5
70°	109.8	59.0	38.7	35.0	33.8
72.5°	92.9	45.1	32.3	29.3	28.6
75°	76.3	35.3	26.7	24.4	23.7
77.5°	61.7	27.1	21.1	19.2	18.8
80°	44.7	19.9	15.8	14.7	14.3
82.5°	30.5	13.5	11.3	10.5	9.8
85°	18.4	7.5	6.8	6.4	6.0
87.5°	7.5	3.4	3.0	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)