

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: P242952

Luminaire Tested: **S121DR-H305D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242952
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-H305D840-X4F0-XX-UDD-F-W
Description: DEFINE 1 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1157.3 lumens
Efficiency: N/A
Efficacy: 103.3 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

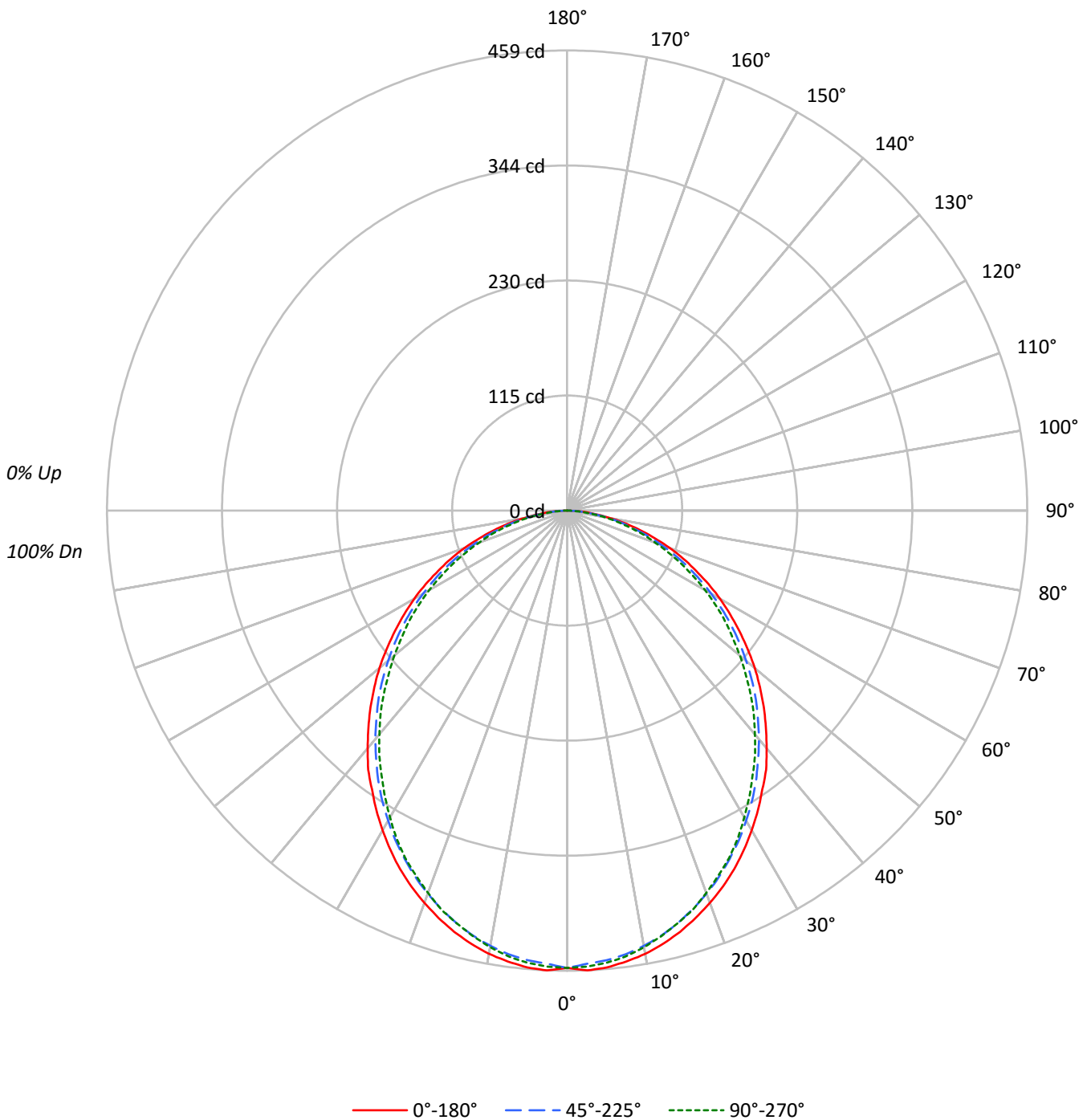
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242952

CATALOG NUMBER: S121DR-H305D840-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P242952

CATALOG NUMBER: S121DR-H305D840-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	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	72	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°	13517	13517	13517
5°	13604	13390	13468
10°	13509	13265	13304
15°	13344	13071	13071
20°	13130	12824	12799
25°	12894	12534	12495
30°	12597	12221	12091
35°	12280	11882	11669
40°	11971	11511	11267
45°	11620	11159	10840
50°	11266	10736	10367
55°	10833	10332	9939
60°	10447	9843	9422
65°	9928	9304	8806
70°	9408	8646	8091
75°	8620	7842	7361
80°	7508	6928	6416
85°	6459	5303	4454



TEST NUMBER: P242952

CATALOG NUMBER: S121DR-H305D840-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	3.7
10°-20°	120.9	10.4
20°-30°	177.8	15.4
30°-40°	206.4	17.8
40°-50°	205.8	17.8
50°-60°	179.2	15.5
60°-70°	131.9	11.4
70°-80°	73.5	6.3
80°-90°	18.9	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°	341.7	29.5
0°-40°	548.1	47.4
0°-60°	933.1	80.6
0°-90°	1157.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1157.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	456	456	456	456	456	
5°	457	455	450	454	453	43
15°	435	432	426	428	426	123
25°	394	390	383	383	382	182
35°	340	335	328	325	323	213
45°	277	273	266	261	259	214
55°	210	206	200	194	192	188
65°	142	139	133	127	126	141
75°	75	72	68	66	64	80
85°	19	18	16	14	13	22
90°	0	0	0	0	0	



TEST NUMBER: P242952

CATALOG NUMBER: S121DR-H305D840-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	456.2	456.2	456.2	456.2	456.2
2.5°	459.1	456.6	452.4	456.2	455.3
5°	457.4	454.9	450.2	453.6	452.8
7.5°	453.6	451.5	446.4	449.4	448.6
10°	449.0	446.4	440.9	443.5	442.2
12.5°	442.6	440.5	434.2	436.3	434.6
15°	435.0	432.5	426.1	427.8	426.1
17.5°	426.1	423.6	416.8	418.1	417.3
20°	416.4	413.0	406.7	407.5	405.9
22.5°	405.9	402.0	395.7	395.7	394.0
25°	394.4	389.8	383.4	383.4	382.2
27.5°	381.8	377.5	370.8	369.9	368.6
30°	368.2	364.0	357.2	355.5	353.4
32.5°	354.3	349.6	343.3	340.3	338.2
35°	339.5	335.3	328.5	324.7	322.6
37.5°	325.9	320.0	312.8	309.5	307.8
40°	309.5	304.4	297.6	293.0	291.3
42.5°	293.4	288.7	281.6	276.9	275.6
45°	277.3	272.7	266.3	260.8	258.7
47.5°	260.8	256.2	249.9	244.4	241.4
50°	244.4	239.7	232.9	227.4	224.9
52.5°	227.0	223.6	216.5	211.4	208.0
55°	209.7	205.9	200.0	194.5	192.4
57.5°	192.8	189.4	183.1	177.1	175.9
60°	176.3	172.9	166.1	161.1	159.0
62.5°	159.0	155.6	149.2	144.2	142.0
65°	141.6	138.7	132.7	127.3	125.6
67.5°	125.6	121.8	116.3	111.2	109.1
70°	108.6	104.4	99.8	95.5	93.4
72.5°	91.7	88.4	84.6	80.3	79.5
75°	75.3	71.9	68.5	65.5	64.3
77.5°	59.6	57.1	54.5	51.6	50.7
80°	44.0	42.3	40.6	38.5	37.6
82.5°	30.9	29.6	27.1	25.4	24.5
85°	19.0	17.8	15.6	13.5	13.1
87.5°	8.9	7.2	5.5	4.7	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)