

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: P243571

Luminaire Tested: **S124RDR-H350D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243571
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-65)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDR-H350D840-X4F0-XX-UDD-F-W
Description: DEFINE 4 REGRESSED 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: 1350.8 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.1 / 1.25
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

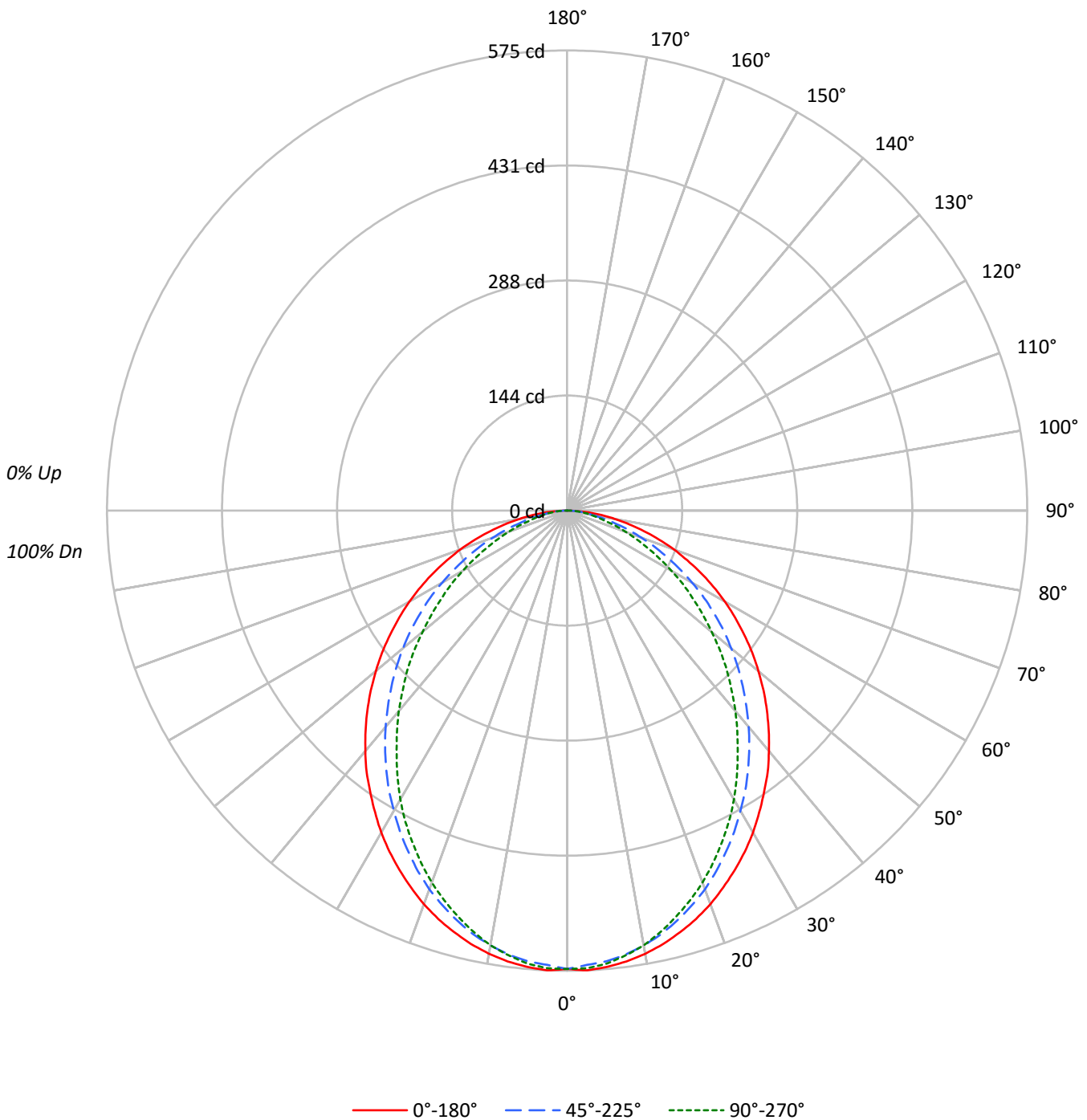
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	49	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5092	5092	5092
5°	5107	5043	5070
10°	5075	4980	4980
15°	5019	4883	4836
20°	4951	4763	4679
25°	4860	4611	4486
30°	4769	4443	4278
35°	4656	4280	4032
40°	4552	4096	3797
45°	4437	3901	3550
50°	4315	3701	3262
55°	4180	3473	2974
60°	4052	3209	2676
65°	3876	2898	2339
70°	3690	2560	2032
75°	3410	2133	1655
80°	3117	1669	1515
85°	2764	1591	1509



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	4.0
10°-20°	150.4	11.1
20°-30°	218.2	16.2
30°-40°	248.7	18.4
40°-50°	241.9	17.9
50°-60°	203.2	15.0
60°-70°	141.6	10.5
70°-80°	73.1	5.4
80°-90°	19.8	1.5
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°	422.5	31.3
0°-40°	671.2	49.7
0°-60°	1116.3	82.6
0°-90°	1350.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1350.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	573	573	573	573	573	
5°	572	571	565	570	568	54
15°	545	541	531	530	526	154
25°	496	486	470	463	457	228
35°	429	416	394	380	372	269
45°	353	336	310	290	282	272
55°	270	252	224	201	192	241
65°	184	167	138	118	111	182
75°	99	84	62	52	48	106
85°	27	17	16	15	15	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	572.8	572.8	572.8	572.8	572.8
2.5°	575.0	573.3	568.2	572.8	572.4
5°	572.4	570.7	565.2	569.5	568.2
7.5°	568.2	566.1	559.7	562.7	560.6
10°	562.3	560.2	551.7	553.8	551.7
12.5°	554.7	551.7	542.4	542.8	539.4
15°	545.4	541.1	530.6	529.7	525.5
17.5°	535.2	529.7	517.5	515.3	510.7
20°	523.4	516.6	503.5	498.9	494.6
22.5°	509.8	501.8	487.4	481.9	476.5
25°	495.5	486.2	470.1	463.3	457.4
27.5°	480.7	469.7	452.4	443.9	438.0
30°	464.6	451.9	432.9	423.2	416.8
32.5°	446.9	434.2	414.3	402.5	394.4
35°	429.1	416.0	394.4	379.6	371.6
37.5°	411.8	397.0	373.7	358.5	349.2
40°	392.3	376.7	353.0	335.7	327.2
42.5°	372.9	356.8	331.4	313.3	304.0
45°	353.0	336.1	310.3	290.4	282.4
47.5°	332.7	315.8	289.2	268.5	259.2
50°	312.0	295.1	267.6	244.8	235.9
52.5°	291.7	273.9	246.5	223.2	213.9
55°	269.7	252.4	224.1	201.2	191.9
57.5°	248.6	230.4	202.9	179.7	172.1
60°	227.9	209.7	180.5	158.1	150.5
62.5°	205.9	187.7	159.0	137.4	130.6
65°	184.3	166.6	137.8	118.0	111.2
67.5°	162.3	146.3	118.4	99.3	93.9
70°	142.0	123.9	98.5	82.0	78.2
72.5°	120.5	104.4	79.9	66.4	63.4
75°	99.3	84.1	62.1	52.0	48.2
77.5°	79.9	65.1	46.9	38.5	38.5
80°	60.9	47.8	32.6	30.4	29.6
82.5°	43.1	30.9	24.1	22.4	22.0
85°	27.1	17.3	15.6	14.8	14.8
87.5°	13.1	8.0	8.0	7.6	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)