

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: P243454

Luminaire Tested: **S124DR-H350D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-84)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-H350D927-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1123.8 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

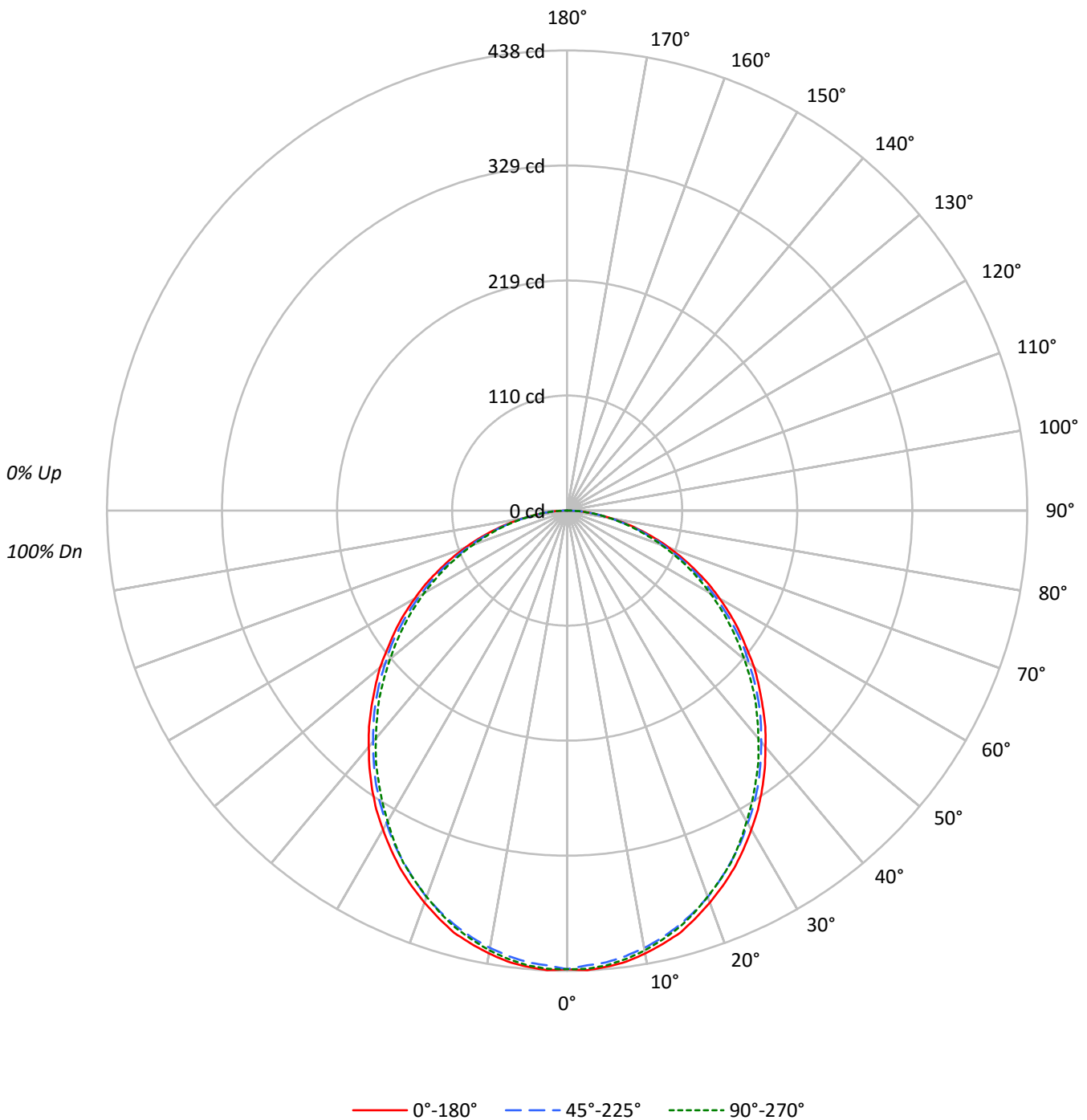
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44					44			
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39					39			
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3880	3880	3880
5°	3889	3851	3876
10°	3863	3815	3838
15°	3827	3766	3782
20°	3756	3702	3700
25°	3686	3619	3623
30°	3599	3529	3507
35°	3511	3442	3400
40°	3408	3334	3285
45°	3309	3242	3179
50°	3217	3124	3045
55°	3099	3016	2923
60°	2980	2880	2791
65°	2839	2743	2652
70°	2687	2565	2482
75°	2476	2380	2304
80°	2181	2145	2089
85°	1917	1917	1887



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	3.7
10°-20°	116.0	10.3
20°-30°	170.9	15.2
30°-40°	198.8	17.7
40°-50°	198.9	17.7
50°-60°	174.0	15.5
60°-70°	129.2	11.5
70°-80°	73.6	6.6
80°-90°	21.2	1.9
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°	328.1	29.2
0°-40°	526.9	46.9
0°-60°	899.8	80.1
0°-90°	1123.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1123.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	436	436	436	436	436	
5°	436	435	432	435	434	41
15°	416	414	409	412	411	117
25°	376	374	369	370	369	173
35°	324	321	317	314	313	202
45°	263	262	258	254	253	203
55°	200	199	195	190	189	179
65°	135	134	130	128	126	134
75°	72	71	69	68	67	76
85°	19	18	19	18	18	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	436.5	436.5	436.5	436.5	436.5
2.5°	437.9	436.9	433.3	436.9	436.5
5°	435.8	435.1	431.6	434.8	434.4
7.5°	433.0	431.6	427.6	430.8	430.5
10°	428.0	426.9	422.7	425.9	425.2
12.5°	422.3	421.3	416.6	419.1	418.4
15°	415.9	413.8	409.2	411.7	411.0
17.5°	406.7	405.3	400.7	402.8	401.7
20°	397.1	395.3	391.4	391.8	391.1
22.5°	386.8	385.0	380.4	381.8	380.4
25°	375.8	374.0	369.0	370.1	369.4
27.5°	363.4	361.6	357.0	357.3	355.9
30°	350.6	348.4	343.8	343.5	341.7
32.5°	337.8	335.7	331.0	329.6	327.8
35°	323.6	320.7	317.2	314.3	313.3
37.5°	309.0	307.6	302.3	300.5	299.1
40°	293.7	292.3	287.3	284.9	283.1
42.5°	279.2	277.4	272.8	269.2	267.8
45°	263.2	262.1	257.9	254.0	252.9
47.5°	247.6	247.2	241.9	238.0	236.2
50°	232.6	230.5	225.9	222.3	220.2
52.5°	215.2	214.9	211.0	206.4	204.6
55°	200.0	198.6	194.6	190.4	188.6
57.5°	184.0	183.3	178.3	174.8	173.0
60°	167.6	166.2	162.0	158.8	157.0
62.5°	152.0	150.2	146.3	143.1	141.4
65°	135.0	133.9	130.4	127.5	126.1
67.5°	119.0	117.6	114.0	111.5	110.1
70°	103.4	101.2	98.7	96.6	95.5
72.5°	87.7	86.0	83.8	82.4	81.0
75°	72.1	70.7	69.3	67.8	67.1
77.5°	57.2	55.8	55.1	54.7	54.0
80°	42.6	41.9	41.9	41.6	40.8
82.5°	30.2	29.5	29.5	29.5	29.1
85°	18.8	18.5	18.8	18.1	18.5
87.5°	8.9	8.9	9.2	8.9	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)