

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: P243700

Luminaire Tested: **S125DR-H375D830-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243700
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-56)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-H375D830-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1325.6 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

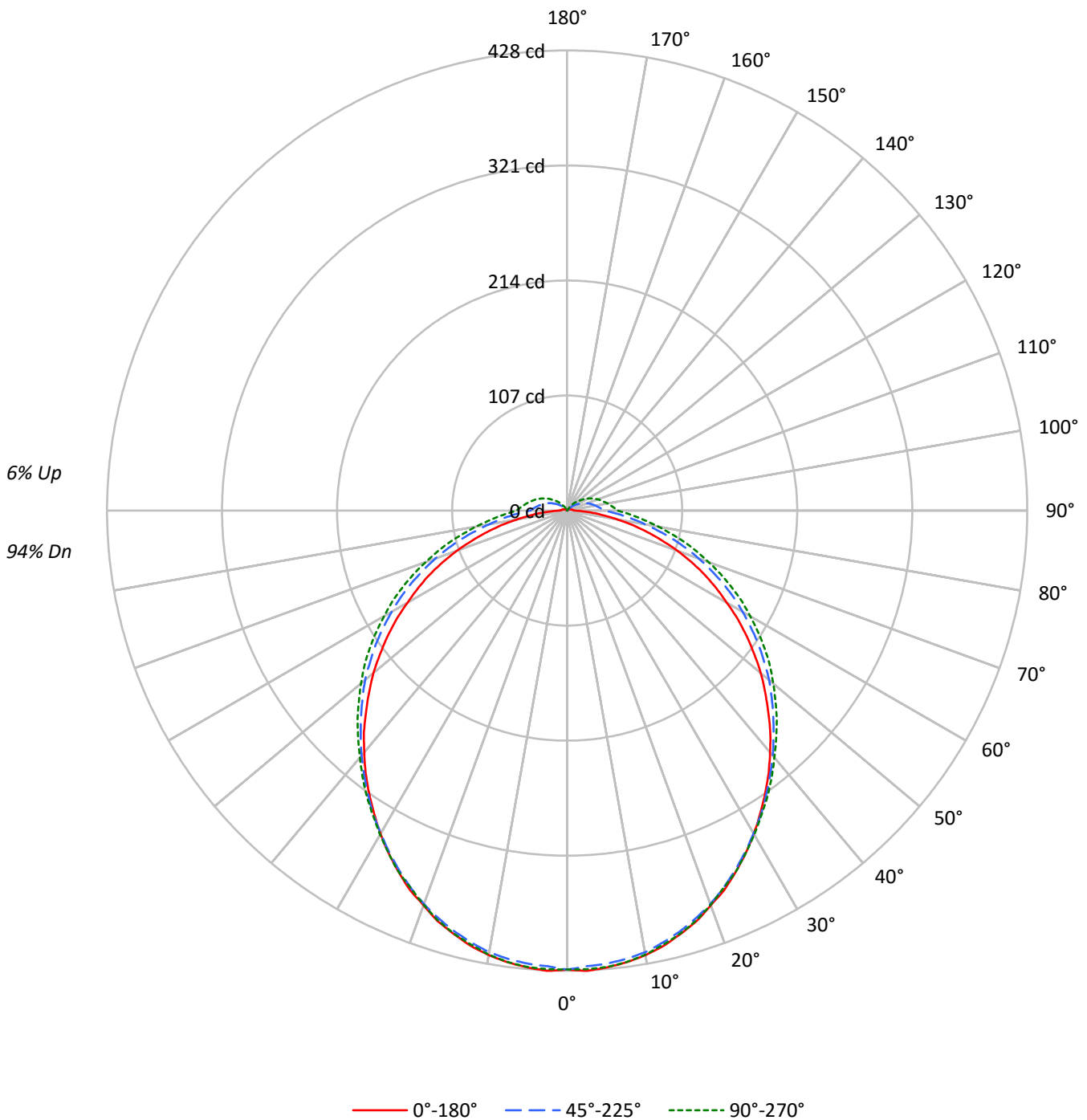
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243700

CATALOG NUMBER: S125DR-H375D830-X4F0-XX-UDD-D-W

Luminous Intensity Polar Plot





TEST NUMBER: P243700

CATALOG NUMBER: S125DR-H375D830-X4F0-XX-UDD-D-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	118	118	118	118	114	114	114	114	108	108	108		102	102	102		96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86		88	85	82		83	81	79	76
2	96	88	80	74	93	85	78	73	81	75	70		76	72	68		72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59		67	61	57		64	59	55	53
4	80	68	59	52	77	66	58	51	63	55	50		60	53	48		57	51	47	45
5	74	60	51	44	71	59	50	44	56	49	43		53	47	42		51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38		48	42	37		46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33		44	37	33		42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30		40	34	29		39	33	29	27
9	55	41	33	27	53	40	33	27	39	32	27		37	31	26		36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24		35	28	24		33	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3034	3034	3034
5°	3037	2975	2984
10°	3018	2925	2917
15°	2982	2855	2834
20°	2931	2777	2739
25°	2880	2688	2646
30°	2814	2597	2543
35°	2746	2509	2451
40°	2676	2423	2360
45°	2602	2337	2285
50°	2536	2265	2206
55°	2453	2178	2133
60°	2352	2082	2040
65°	2272	1982	1949
70°	2137	1858	1831
75°	1955	1713	1725
80°	1740	1556	1593
85°	1551	1455	1516



TEST NUMBER: P243700

CATALOG NUMBER: S125DR-H375D830-X4F0-XX-UDD-D-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.4	3.0
10°-20°	114.8	8.7
20°-30°	170.8	12.9
30°-40°	202.4	15.3
40°-50°	209.4	15.8
50°-60°	193.2	14.6
60°-70°	156.1	11.8
70°-80°	104.3	7.9
80°-90°	53.8	4.1
90°-100°	30.2	2.3
100°-110°	22.4	1.7
110°-120°	14.9	1.1
120°-130°	8.3	0.6
130°-140°	3.7	0.3
140°-150°	0.8	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	326.0	24.6
0°-40°	528.4	39.9
0°-60°	931.0	70.2
0°-90°	1245.2	93.9
90°-120°	67.5	5.1
90°-150°	80.4	6.1
90°-180°	80.0	6.0
0°-180°	1325.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	427	427	427	427	427	
5°	426	426	423	426	426	41
15°	408	409	405	408	407	115
25°	371	372	369	371	371	171
35°	321	324	323	324	325	201
45°	264	269	271	275	276	204
55°	204	210	217	222	224	182
65°	141	150	160	167	169	139
75°	77	88	101	110	113	82
85°	24	37	52	61	64	24
90°	7	20	34	44	47	5
95°	6	17	30	40	42	4
105°	4	11	23	32	34	4
115°	3	6	16	24	26	3
125°	2	2	10	15	18	2
135°	1	1	4	9	11	1
145°	0	0	0	2	4	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P243700

CATALOG NUMBER: S125DR-H375D830-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	426.9	426.9	426.9	426.9	426.9
2.5°	428.5	427.3	424.2	427.3	426.9
5°	426.5	426.1	423.0	426.1	426.1
7.5°	423.8	423.4	420.6	423.8	423.4
10°	419.8	419.8	417.1	419.4	419.4
12.5°	414.7	414.7	411.5	414.3	413.5
15°	407.6	408.8	405.2	407.6	407.2
17.5°	400.5	400.5	397.7	399.7	399.7
20°	390.6	392.2	389.4	391.4	390.2
22.5°	382.0	382.7	380.0	382.0	380.0
25°	370.9	372.5	369.3	371.3	370.9
27.5°	359.5	360.6	358.3	360.6	359.5
30°	347.2	348.4	346.8	348.4	348.0
32.5°	334.2	336.6	335.4	336.6	336.2
35°	321.2	323.6	322.8	324.3	324.7
37.5°	307.8	310.1	310.1	312.1	312.5
40°	293.6	296.7	297.5	300.3	299.9
42.5°	279.8	282.9	284.1	287.6	287.6
45°	264.4	268.7	271.1	275.4	275.8
47.5°	249.8	254.5	258.1	262.0	262.8
50°	235.2	239.5	245.4	249.4	250.2
52.5°	219.4	224.9	230.8	236.4	237.9
55°	204.0	210.3	217.4	222.5	224.5
57.5°	188.2	194.9	202.8	209.1	210.7
60°	171.6	179.5	188.6	194.9	196.5
62.5°	156.3	164.9	174.4	181.1	183.5
65°	141.3	149.5	159.8	166.9	168.9
67.5°	125.1	134.2	144.8	152.7	154.7
70°	108.9	118.8	130.2	137.7	139.7
72.5°	92.3	103.4	115.6	123.9	126.3
75°	76.9	88.4	101.0	109.7	112.8
77.5°	62.3	74.2	86.8	95.9	98.6
80°	47.7	60.0	73.8	83.3	86.0
82.5°	34.7	47.7	61.9	71.4	74.2
85°	23.7	37.1	51.7	60.8	63.9
87.5°	14.6	27.6	42.6	51.7	54.8
90°	6.7	19.7	34.3	43.8	47.0
92.5°	5.9	18.2	32.4	41.8	44.6
95°	5.5	16.6	30.4	39.5	42.2
97.5°	5.1	15.0	28.4	37.5	40.2
100°	4.7	13.4	26.8	35.5	38.3
102.5°	4.3	12.2	24.9	33.5	35.9
105°	3.9	10.7	23.3	31.6	34.3
107.5°	3.6	9.1	21.7	29.6	32.4
110°	3.2	7.9	19.7	27.6	30.4



TEST NUMBER: P243700

CATALOG NUMBER: S125DR-H375D830-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.8	6.7	18.2	25.6	28.4
115°	2.8	5.5	16.2	23.7	26.4
117.5°	2.4	4.3	14.2	21.7	24.5
120°	2.0	3.2	12.6	19.7	22.5
122.5°	2.0	2.4	11.0	17.8	20.5
125°	1.6	1.6	9.5	15.4	18.2
127.5°	1.6	1.2	7.9	13.8	15.8
130°	1.2	0.8	6.7	12.2	14.2
132.5°	1.2	0.8	5.1	10.7	12.6
135°	0.8	0.8	3.6	9.1	10.7
137.5°	0.8	0.4	2.4	7.1	9.1
140°	0.4	0.4	0.8	5.5	7.1
142.5°	0.4	0.4	0.4	3.9	5.5
145°	0.4	0.0	0.0	2.4	3.6
147.5°	0.4	0.0	0.0	0.8	2.0
150°	0.0	0.0	0.0	0.0	0.4
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)