

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P242869

Luminaire Tested: S125RDRP-S375D927-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242869
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S375D927-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

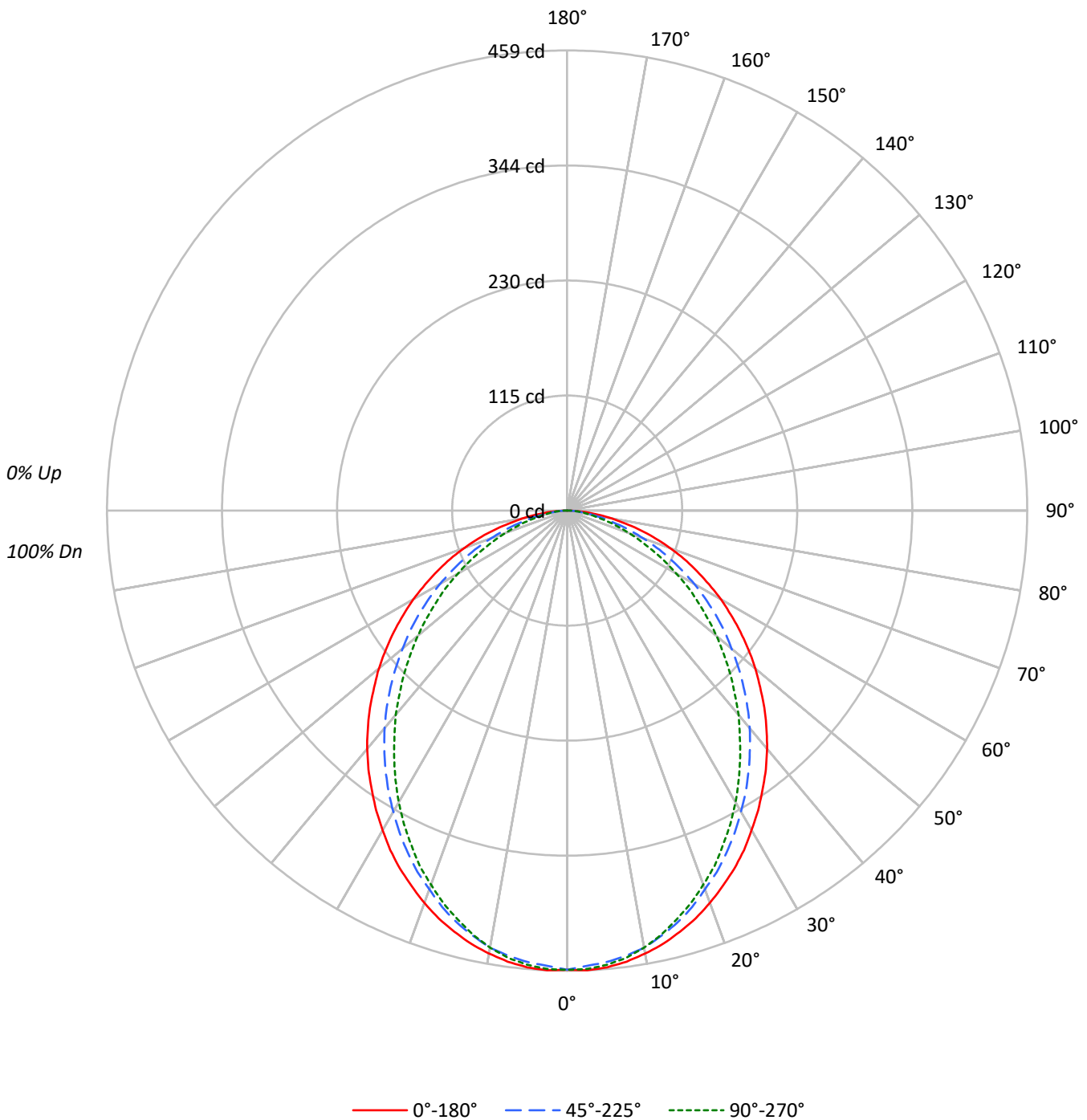
Lumens per Lamp: N/A
Luminaire Lumens: 1082.0 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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: 24 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	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	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	48	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	29
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°	3255	3255	3255
5°	3263	3226	3245
10°	3238	3195	3195
15°	3199	3130	3105
20°	3149	3040	3003
25°	3092	2951	2886
30°	3020	2847	2757
35°	2947	2740	2611
40°	2879	2628	2468
45°	2795	2503	2312
50°	2711	2367	2149
55°	2615	2238	1976
60°	2517	2080	1790
65°	2403	1897	1576
70°	2271	1667	1359
75°	2090	1406	1131
80°	1842	1105	950
85°	1549	905	848

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2795 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.1	4.0
10°-20°	120.5	11.1
20°-30°	174.7	16.1
30°-40°	199.0	18.4
40°-50°	193.9	17.9
50°-60°	163.2	15.1
60°-70°	114.4	10.6
70°-80°	58.6	5.4
80°-90°	14.6	1.4
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°	338.2	31.3
0°-40°	537.2	49.6
0°-60°	894.3	82.7
0°-90°	1082.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1082.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	458	458	458	458	458	
5°	457	456	452	456	455	43
15°	435	433	425	425	422	123
25°	394	389	376	372	368	181
35°	340	331	316	306	301	213
45°	278	268	249	235	230	214
55°	211	200	181	165	160	189
65°	143	131	113	99	94	141
75°	76	66	51	44	41	80
85°	19	13	11	11	10	22
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	458.0	458.0	458.0	458.0	458.0
2.5°	459.0	458.0	454.5	458.0	457.6
5°	457.3	455.9	452.1	455.5	454.8
7.5°	453.8	452.4	447.9	450.7	450.0
10°	448.6	447.6	442.7	443.8	442.7
12.5°	442.7	441.3	434.4	435.1	433.4
15°	434.8	432.7	425.4	425.1	422.0
17.5°	426.5	423.4	414.7	413.0	410.6
20°	416.4	413.0	401.9	400.2	397.1
22.5°	405.4	401.9	390.2	386.4	383.9
25°	394.3	389.1	376.3	371.8	368.0
27.5°	381.9	375.6	362.1	356.3	352.5
30°	368.0	361.5	346.9	339.0	335.9
32.5°	354.5	346.6	331.7	322.7	318.6
35°	339.7	331.4	315.8	305.8	300.9
37.5°	325.5	315.4	299.5	287.8	282.9
40°	310.3	299.9	283.3	270.1	266.0
42.5°	294.3	283.6	266.3	253.9	247.3
45°	278.1	268.1	249.0	235.2	230.0
47.5°	261.1	250.8	231.7	217.6	211.7
50°	245.2	233.8	214.1	199.6	194.4
52.5°	227.9	216.2	197.8	181.9	176.7
55°	211.0	199.9	180.6	165.0	159.5
57.5°	193.7	181.9	163.3	148.0	143.2
60°	177.1	165.0	146.3	131.1	125.9
62.5°	159.5	148.0	129.0	115.2	110.0
65°	142.9	131.1	112.8	98.9	93.7
67.5°	126.2	114.5	96.8	83.7	79.6
70°	109.3	97.5	80.2	69.5	65.4
72.5°	92.7	81.3	65.4	55.7	53.3
75°	76.1	65.7	51.2	43.6	41.2
77.5°	59.1	50.8	38.7	32.9	30.8
80°	45.0	36.7	27.0	23.9	23.2
82.5°	31.1	23.9	18.0	16.9	16.6
85°	19.0	12.8	11.1	10.7	10.4
87.5°	8.0	5.5	5.2	5.2	4.8
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.44	17.01	15.80	17.33	17.64	13.87	15.45	14.24	15.76	16.07
	3H	17.22	18.64	17.60	18.97	19.33	15.19	16.60	15.56	16.93	17.29
	4H	17.89	19.22	18.28	19.57	19.94	15.60	16.93	16.00	17.28	17.65
	6H	18.35	19.59	18.77	19.95	20.34	15.85	17.09	16.26	17.45	17.84
	8H	18.50	19.68	18.93	20.07	20.47	15.93	17.11	16.36	17.50	17.90
	12H	18.60	19.73	19.03	20.11	20.54	15.99	17.11	16.42	17.50	17.93
4H	2H	15.83	17.16	16.23	17.51	17.89	14.56	15.89	14.96	16.24	16.62
	3H	17.81	18.92	18.22	19.32	19.72	16.06	17.17	16.47	17.57	17.97
	4H	18.60	19.60	19.03	20.01	20.45	16.56	17.56	16.99	17.97	18.41
	6H	19.19	20.06	19.65	20.50	20.96	16.90	17.77	17.35	18.21	18.67
	8H	19.38	20.20	19.85	20.64	21.11	17.01	17.83	17.47	18.27	18.73
	12H	19.52	20.25	20.00	20.73	21.20	17.10	17.83	17.58	18.30	18.77
8H	4H	18.72	19.54	19.18	19.98	20.45	16.87	17.69	17.33	18.13	18.59
	6H	19.40	20.07	19.89	20.56	21.04	17.29	17.97	17.79	18.46	18.94
	8H	19.64	20.25	20.16	20.76	21.25	17.45	18.06	17.97	18.57	19.05
	12H	19.84	20.38	20.35	20.87	21.43	17.59	18.13	18.10	18.62	19.18
12H	4H	18.72	19.45	19.20	19.92	20.39	16.91	17.64	17.39	18.11	18.59
	6H	19.39	20.00	19.90	20.51	20.99	17.35	17.95	17.86	18.46	18.95
	8H	19.68	20.21	20.19	20.71	21.27	17.55	18.09	18.06	18.58	19.14