

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: P242874

Luminaire Tested: S125RDRP-S375D830-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242874
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-S375D830-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

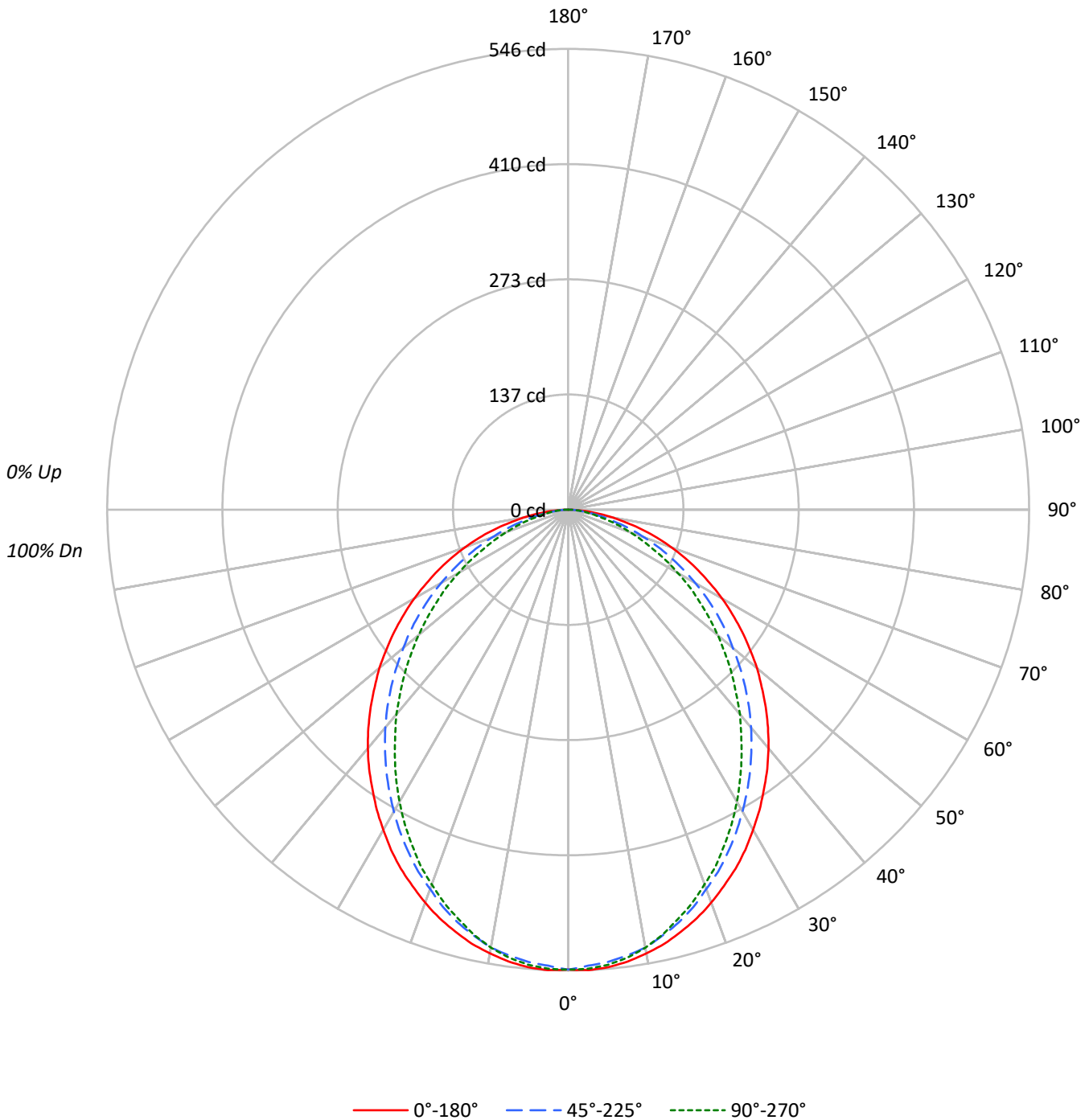
Lumens per Lamp: N/A
Luminaire Lumens: 1287.4 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3873	3873	3873
5°	3882	3838	3861
10°	3852	3802	3802
15°	3806	3725	3694
20°	3748	3617	3573
25°	3680	3512	3434
30°	3594	3388	3279
35°	3506	3260	3106
40°	3425	3127	2936
45°	3326	2978	2751
50°	3226	2816	2557
55°	3110	2662	2351
60°	2995	2475	2129
65°	2859	2257	1875
70°	2701	1985	1617
75°	2485	1672	1346
80°	2190	1314	1130
85°	1843	1076	1003

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3326 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	4.0
10°-20°	143.3	11.1
20°-30°	207.8	16.1
30°-40°	236.7	18.4
40°-50°	230.8	17.9
50°-60°	194.2	15.1
60°-70°	136.1	10.6
70°-80°	69.8	5.4
80°-90°	17.4	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°	402.4	31.3
0°-40°	639.1	49.6
0°-60°	1064.1	82.7
0°-90°	1287.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1287.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	545	545	545	545	545	
5°	544	542	538	542	541	52
15°	517	515	506	506	502	146
25°	469	463	448	442	438	216
35°	404	394	376	364	358	253
45°	331	319	296	280	274	255
55°	251	238	215	196	190	224
65°	170	156	134	118	112	168
75°	90	78	61	52	49	96
85°	23	15	13	13	12	26
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	544.9	544.9	544.9	544.9	544.9
2.5°	546.1	544.9	540.8	544.9	544.5
5°	544.1	542.4	537.9	542.0	541.2
7.5°	539.9	538.3	532.9	536.2	535.4
10°	533.8	532.5	526.8	528.0	526.8
12.5°	526.8	525.1	516.9	517.7	515.7
15°	517.3	514.8	506.2	505.8	502.1
17.5°	507.4	503.7	493.4	491.4	488.5
20°	495.5	491.4	478.2	476.1	472.4
22.5°	482.3	478.2	464.2	459.7	456.8
25°	469.2	463.0	447.8	442.4	437.9
27.5°	454.3	446.9	430.9	423.9	419.4
30°	437.9	430.1	412.8	403.3	399.6
32.5°	421.8	412.4	394.7	384.0	379.0
35°	404.1	394.3	375.7	363.8	358.0
37.5°	387.3	375.3	356.4	342.4	336.6
40°	369.1	356.8	337.0	321.4	316.5
42.5°	350.2	337.5	316.9	302.1	294.2
45°	330.9	318.9	296.3	279.8	273.7
47.5°	310.7	298.4	275.7	258.9	251.9
50°	291.8	278.2	254.7	237.5	231.3
52.5°	271.2	257.2	235.4	216.5	210.3
55°	251.0	237.9	214.8	196.3	189.7
57.5°	230.5	216.5	194.2	176.1	170.4
60°	210.7	196.3	174.1	156.0	149.8
62.5°	189.7	176.1	153.5	137.0	130.9
65°	170.0	156.0	134.2	117.7	111.5
67.5°	150.2	136.2	115.2	99.6	94.7
70°	130.0	116.1	95.5	82.7	77.8
72.5°	110.3	96.7	77.8	66.3	63.4
75°	90.5	78.2	60.9	51.9	49.0
77.5°	70.4	60.5	46.1	39.1	36.6
80°	53.5	43.6	32.1	28.4	27.6
82.5°	37.0	28.4	21.4	20.2	19.8
85°	22.6	15.2	13.2	12.8	12.3
87.5°	9.5	6.6	6.2	6.2	5.8
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	16.04	17.62	16.41	17.93	18.25	14.47	16.05	14.84	16.36	16.68
	3H	17.83	19.25	18.21	19.57	19.93	15.79	17.21	16.17	17.54	17.90
	4H	18.49	19.82	18.89	20.17	20.55	16.20	17.53	16.60	17.88	18.26
	6H	18.96	20.19	19.37	20.56	20.95	16.46	17.69	16.87	18.05	18.45
	8H	19.11	20.28	19.53	20.67	21.07	16.54	17.71	16.96	18.10	18.50
	12H	19.21	20.33	19.64	20.71	21.14	16.59	17.72	17.02	18.10	18.53
4H	2H	16.44	17.77	16.83	18.12	18.49	15.16	16.50	15.56	16.84	17.22
	3H	18.42	19.53	18.83	19.93	20.33	16.66	17.77	17.07	18.17	18.57
	4H	19.20	20.20	19.63	20.62	21.06	17.16	18.16	17.59	18.58	19.01
	6H	19.80	20.67	20.25	21.11	21.57	17.50	18.38	17.96	18.82	19.27
	8H	19.99	20.80	20.45	21.25	21.71	17.61	18.43	18.08	18.87	19.34
	12H	20.13	20.86	20.61	21.33	21.80	17.70	18.43	18.18	18.91	19.38
8H	4H	19.33	20.14	19.79	20.59	21.05	17.47	18.29	17.94	18.73	19.20
	6H	20.00	20.68	20.50	21.17	21.64	17.90	18.57	18.39	19.06	19.54
	8H	20.25	20.85	20.76	21.36	21.85	18.06	18.66	18.57	19.17	19.66
	12H	20.44	20.98	20.95	21.47	22.03	18.20	18.73	18.71	19.23	19.79
12H	4H	19.32	20.05	19.80	20.53	21.00	17.51	18.24	17.99	18.72	19.19
	6H	20.00	20.60	20.51	21.11	21.60	17.95	18.56	18.46	19.06	19.55
	8H	20.28	20.82	20.79	21.31	21.87	18.16	18.69	18.66	19.18	19.75