

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: METALUX

Report Number: P295273

Luminaire Tested: **UHB-12-UNV-L850-CD-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P295273
Test Lab: Standard-Tech Co., Ltd Testing Center
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: UHB-12-UNV-L850-CD-U
Description: UHB 100W 5000K ROUND HIGH BAY LED WITH CLEAR RING LENS
Light Source: 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

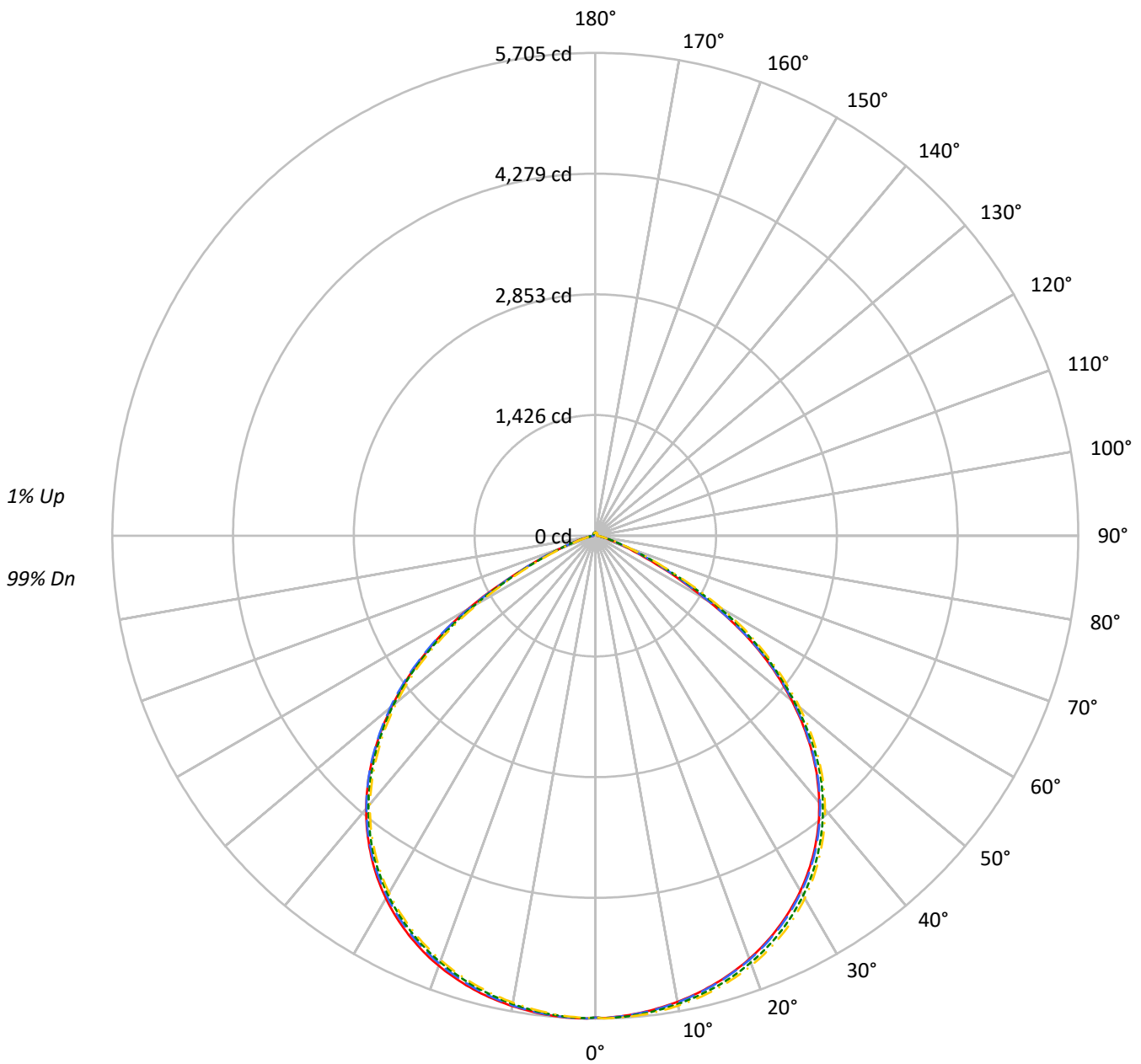
Lumens per Lamp: N/A
Luminaire Lumens: 13671.8 lumens
Efficiency: N/A
Efficacy: 135.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.36
Luminous Opening: Circular (Dia: 0.26m x H: 0m)
CIE Type: Direct

Input Watts (W): 100.578
Input Voltage (V): 120
Input Current (Ain): 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: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - - - 135°-315°



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

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	110	110	110	105	105	105	101	101	101	99								
1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	92	90	89	87								
2	102	95	89	84	99	93	88	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	77	72	91	83	76	71	80	74	70	77	72	68	75	71	67	65								
4	86	76	68	62	84	74	67	61	72	65	60	69	64	60	67	63	59	57								
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50								
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	55	50	46	44								
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39								
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35								
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	37	33	32								
10	56	44	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	107193	107193	107193	107193
5°	107139	107414	107659	107421
10°	106946	107477	107931	107441
15°	106800	107554	108229	107459
20°	106632	107580	108398	107436
25°	106184	107385	108256	107179
30°	105353	106773	107621	106499
35°	103842	105394	106162	105116
40°	101130	102861	103517	102499
45°	96416	98358	99080	98033
50°	88738	90408	92040	91302
55°	77277	79730	81526	80255
60°	57823	62950	65933	62400
65°	35119	40405	42366	40855
70°	19814	22821	24010	23327
75°	11738	13223	14504	13870
80°	8146	9285	10044	9675
85°	6483	7088	7996	7067



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	540.3	4.0
10°-20°	1556.6	11.4
20°-30°	2377.2	17.4
30°-40°	2855.1	20.9
40°-50°	2826.8	20.7
50°-60°	2153.3	15.7
60°-70°	929.0	6.8
70°-80°	216.7	1.6
80°-90°	44.4	0.3
90°-100°	23.9	0.2
100°-110°	24.1	0.2
110°-120°	24.7	0.2
120°-130°	25.0	0.2
130°-140°	23.5	0.2
140°-150°	20.5	0.1
150°-160°	16.3	0.1
160°-170°	10.7	0.1
170°-180°	3.7	0.0
0°-30°	4474.0	32.7
0°-40°	7329.1	53.6
0°-60°	12309.2	90.0
0°-90°	13499.3	98.7
90°-120°	72.8	0.5
90°-150°	141.8	1.0
90°-180°	172.0	1.3
0°-180°	13671.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5691	5691	5691	5691	5691	
5°	5667	5681	5694	5682	5667	539
15°	5477	5516	5550	5511	5477	1546
25°	5109	5167	5209	5157	5109	2354
35°	4516	4584	4617	4572	4516	2820
45°	3620	3693	3720	3680	3620	2778
55°	2353	2428	2483	2444	2353	2075
65°	788	907	951	917	788	831
75°	161	182	199	191	161	191
85°	30	33	37	33	30	34
90°	22	22	22	22	22	12
95°	22	22	22	22	22	18
105°	22	24	23	22	22	23
115°	24	26	26	24	24	24
125°	27	29	28	27	27	24
135°	29	32	31	29	29	23
145°	31	34	33	31	31	20
155°	34	36	36	34	34	16
165°	38	38	38	37	38	11
175°	39	39	38	39	39	4
180°	38	38	38	38	38	



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	5691.2	5691.2	5691.2	5691.2	5691.2	5691.2	5691.2	5691.2	5691.2	5691.2	5691.2
1°	5698.8	5699.6	5699.6	5701.5	5702.3	5702.8	5703.9	5704.4	5704.7	5704.8	5704.3
2°	5693.3	5694.4	5694.5	5697.6	5698.8	5700.9	5703.1	5704.0	5704.6	5704.4	5703.9
3°	5685.8	5687.3	5688.4	5692.1	5695.0	5697.4	5700.7	5702.1	5703.4	5702.1	5701.1
4°	5677.0	5678.7	5679.9	5684.8	5689.2	5692.4	5696.8	5698.1	5699.4	5698.1	5696.7
5°	5666.7	5668.3	5670.3	5676.6	5681.2	5685.8	5691.2	5692.8	5694.2	5692.4	5690.5
6°	5654.5	5656.7	5658.7	5666.2	5672.0	5677.4	5684.3	5685.3	5687.7	5684.8	5682.8
7°	5641.0	5643.6	5645.9	5655.3	5661.4	5667.6	5675.5	5677.2	5679.0	5675.7	5673.1
8°	5625.8	5629.2	5631.3	5641.3	5649.1	5656.2	5665.0	5666.6	5669.1	5664.2	5661.7
9°	5609.4	5613.0	5615.6	5626.5	5635.1	5642.5	5652.5	5654.3	5657.1	5651.4	5648.3
10°	5591.8	5594.9	5597.9	5609.6	5619.6	5627.8	5638.6	5640.9	5643.3	5637.1	5633.5
11°	5572.1	5575.6	5578.5	5590.4	5601.8	5610.7	5622.4	5624.9	5627.9	5620.8	5616.7
12°	5550.5	5554.6	5557.0	5571.3	5582.4	5591.6	5604.6	5608.1	5611.4	5602.3	5598.2
13°	5527.8	5532.0	5533.9	5549.3	5561.9	5571.5	5585.8	5589.9	5592.8	5582.8	5577.2
14°	5503.5	5508.0	5509.8	5525.6	5539.7	5549.5	5565.0	5569.0	5572.9	5561.3	5554.3
15°	5477.1	5482.2	5484.0	5500.1	5515.8	5525.6	5542.2	5546.2	5550.4	5538.0	5530.8
16°	5449.9	5454.9	5456.6	5473.1	5490.1	5499.8	5517.4	5521.3	5525.7	5512.3	5504.6
17°	5420.3	5425.9	5427.6	5444.9	5462.4	5472.1	5490.8	5495.1	5499.2	5484.8	5477.3
18°	5389.0	5395.1	5396.8	5414.6	5432.1	5442.4	5462.5	5467.0	5470.5	5455.3	5447.2
19°	5355.7	5362.6	5363.6	5381.9	5400.9	5411.7	5432.7	5436.4	5440.2	5424.1	5416.8
20°	5320.0	5327.0	5329.1	5347.9	5367.3	5379.3	5400.9	5403.8	5408.1	5390.8	5382.3
21°	5282.1	5289.8	5291.9	5311.4	5332.0	5343.9	5366.6	5369.2	5372.9	5354.7	5346.5
22°	5242.2	5250.7	5253.0	5272.8	5294.5	5306.4	5330.3	5332.2	5335.4	5317.0	5307.8
23°	5200.1	5209.5	5211.9	5231.4	5254.4	5266.7	5291.1	5291.9	5295.5	5276.6	5267.4
24°	5155.9	5165.8	5168.5	5188.9	5212.2	5224.6	5250.0	5249.8	5252.6	5233.9	5224.4
25°	5109.4	5119.8	5122.9	5143.2	5167.2	5180.0	5205.8	5205.1	5209.1	5188.7	5180.0
26°	5060.6	5072.1	5075.1	5096.1	5121.0	5132.9	5160.0	5157.8	5161.8	5141.2	5132.5
27°	5010.4	5022.3	5025.1	5046.5	5071.6	5083.5	5111.2	5108.4	5112.7	5091.4	5083.2
28°	4957.8	4970.0	4973.3	4994.6	5019.5	5031.3	5059.5	5055.4	5059.8	5038.2	5031.5
29°	4902.4	4915.9	4918.1	4941.4	4965.8	4977.4	5005.1	5001.5	5006.1	4984.6	4977.5
30°	4844.1	4858.5	4861.5	4883.8	4909.4	4920.0	4947.9	4943.4	4948.4	4926.6	4921.1
31°	4786.0	4800.6	4801.8	4825.8	4850.5	4860.7	4887.8	4881.5	4888.0	4866.4	4862.4
32°	4722.3	4737.6	4738.6	4763.1	4788.0	4798.1	4824.7	4818.3	4824.5	4804.2	4802.3
33°	4656.0	4672.6	4673.5	4697.9	4723.4	4733.5	4759.8	4751.1	4758.6	4738.6	4737.3
34°	4588.2	4605.4	4605.2	4630.4	4654.9	4665.1	4691.1	4682.2	4689.4	4670.5	4669.6
35°	4516.2	4533.9	4533.6	4558.4	4583.7	4592.6	4618.8	4608.4	4617.1	4598.3	4599.1
36°	4442.4	4461.0	4459.1	4484.8	4510.6	4517.9	4545.6	4534.0	4542.3	4524.5	4527.3
37°	4365.6	4383.8	4381.2	4407.0	4433.0	4441.5	4468.0	4454.6	4463.1	4446.0	4451.2
38°	4284.1	4304.0	4300.1	4326.9	4353.0	4361.2	4388.6	4374.0	4382.2	4365.7	4373.2
39°	4200.8	4221.2	4215.9	4244.0	4269.6	4277.7	4305.6	4289.1	4298.1	4282.2	4290.8
40°	4113.1	4134.2	4129.3	4156.8	4183.5	4189.0	4218.9	4202.1	4210.2	4195.6	4205.9
41°	4021.4	4044.9	4037.1	4068.0	4094.8	4099.9	4131.0	4110.4	4120.6	4105.4	4117.7
42°	3926.7	3950.5	3942.1	3974.9	4000.3	4005.5	4035.6	4015.1	4025.2	4011.4	4025.4
43°	3830.1	3854.1	3845.2	3878.7	3903.5	3906.5	3939.5	3917.0	3928.0	3912.7	3928.6
44°	3727.0	3751.1	3741.3	3775.9	3800.0	3805.3	3836.6	3814.5	3826.3	3811.4	3830.0



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	3619.7	3646.3	3635.6	3671.5	3692.6	3699.3	3732.9	3708.0	3719.7	3706.5	3726.4
46°	3509.0	3537.2	3524.6	3561.7	3580.8	3587.2	3623.8	3597.6	3611.7	3597.6	3620.6
47°	3394.0	3425.7	3412.0	3444.5	3459.4	3469.9	3512.2	3483.0	3498.1	3486.1	3508.5
48°	3275.2	3307.3	3294.9	3324.7	3337.8	3349.3	3396.4	3366.8	3383.7	3371.0	3398.0
49°	3151.9	3188.6	3176.0	3200.7	3210.0	3223.2	3273.8	3246.2	3262.0	3253.8	3279.9
50°	3028.4	3063.7	3054.2	3074.9	3085.4	3096.5	3149.4	3126.6	3141.1	3134.2	3161.9
51°	2901.1	2936.3	2924.6	2946.2	2959.1	2967.6	3020.0	2999.6	3015.5	3011.0	3038.5
52°	2770.6	2807.1	2793.9	2817.5	2831.7	2837.2	2890.1	2870.3	2886.5	2885.8	2912.7
53°	2636.6	2666.2	2658.0	2681.0	2702.6	2704.3	2759.0	2739.6	2756.8	2756.7	2784.5
54°	2497.3	2525.2	2518.8	2544.4	2565.3	2568.8	2621.9	2609.0	2619.7	2624.5	2646.4
55°	2353.3	2383.9	2374.1	2407.8	2428.0	2434.1	2484.8	2472.4	2482.7	2490.3	2508.4
56°	2203.8	2233.5	2221.5	2264.9	2291.8	2296.9	2347.7	2333.8	2345.7	2352.3	2370.3
57°	2045.8	2075.6	2063.8	2116.0	2148.4	2153.8	2208.4	2192.0	2205.4	2209.4	2222.3
58°	1880.8	1912.8	1898.1	1958.7	1996.8	2008.3	2063.9	2047.1	2062.0	2059.6	2063.9
59°	1708.6	1741.9	1729.7	1799.2	1838.8	1852.7	1905.9	1895.5	1909.5	1900.0	1896.0
60°	1535.0	1572.1	1559.8	1633.1	1671.1	1690.6	1742.9	1736.5	1750.3	1733.6	1724.1
61°	1361.1	1403.7	1397.3	1468.0	1504.2	1527.8	1571.5	1568.5	1582.0	1561.5	1552.8
62°	1198.6	1238.3	1240.1	1310.6	1338.3	1361.7	1401.3	1396.2	1413.0	1392.4	1383.1
63°	1061.7	1082.1	1110.0	1155.5	1180.7	1199.8	1235.3	1224.8	1246.0	1224.8	1221.8
64°	924.9	945.0	980.8	1016.6	1036.9	1062.6	1083.9	1082.8	1090.6	1086.3	1078.0
65°	788.0	822.6	851.5	887.2	906.6	926.2	949.6	941.4	950.6	948.0	947.0
66°	678.4	713.0	741.5	770.4	787.2	789.8	825.9	800.0	824.3	809.6	827.8
67°	578.3	612.3	639.9	664.4	680.5	680.4	717.4	690.5	712.5	703.3	720.7
68°	490.3	525.8	549.5	570.8	578.3	582.4	614.4	591.4	606.4	604.0	616.4
69°	420.4	450.8	471.4	488.9	490.9	498.4	521.6	507.1	513.1	518.7	523.7
70°	359.8	381.6	402.0	417.6	414.4	424.6	443.1	435.0	436.0	445.3	443.7
71°	305.2	324.6	340.7	364.0	354.7	360.9	380.3	372.6	371.6	378.3	377.0
72°	263.2	280.6	296.6	304.7	301.1	303.7	323.9	315.6	317.0	318.5	322.2
73°	227.5	236.6	245.1	264.5	261.2	260.4	279.8	268.2	277.8	274.0	279.9
74°	192.0	192.8	204.9	224.3	221.3	219.2	235.8	225.6	238.5	228.0	237.6
75°	161.3	159.5	177.7	184.1	181.7	185.3	192.1	188.7	199.3	190.6	195.3
76°	137.6	135.0	151.0	154.1	155.6	154.0	160.5	155.8	169.6	160.3	164.6
77°	120.8	114.6	129.9	129.6	134.4	130.7	138.6	133.0	143.7	135.7	142.0
78°	104.2	98.6	113.8	110.1	115.5	114.8	119.1	117.2	123.0	119.3	121.3
79°	87.6	85.1	97.7	93.8	99.8	99.0	103.0	101.5	107.2	103.0	104.8
80°	75.1	73.6	81.7	80.3	85.6	83.2	89.2	85.9	92.6	86.7	91.0
81°	64.3	63.7	69.0	69.4	73.4	71.6	77.2	74.6	79.5	74.5	78.3
82°	53.8	53.8	57.9	58.5	61.8	60.3	65.7	63.8	68.0	63.9	66.5
83°	43.7	44.8	46.6	48.3	50.9	50.1	54.5	53.3	56.7	54.0	55.6
84°	35.0	36.4	37.2	38.9	40.1	40.4	43.5	43.4	46.5	44.5	45.5
85°	30.0	31.1	31.4	32.5	32.8	33.4	35.3	35.3	37.0	36.1	37.1
86°	26.5	27.4	27.5	28.9	28.9	29.8	30.6	30.5	31.1	31.0	31.3
87°	23.4	23.5	23.7	24.6	25.5	25.9	27.1	27.0	27.5	27.5	27.7
88°	22.6	22.7	22.7	22.9	23.5	23.7	24.0	23.9	24.1	24.0	24.0
89°	21.7	21.8	21.7	22.0	22.7	22.7	23.0	23.0	23.2	23.1	23.1



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	21.5	21.5	21.5	21.5	22.1	22.1	22.1	22.1	22.2	22.2	22.2
91°	21.5	21.5	21.5	21.4	22.1	22.0	22.1	22.0	22.0	22.0	22.0
92°	21.5	21.5	21.5	21.4	22.2	22.1	22.1	22.0	22.0	22.0	22.0
93°	21.5	21.5	21.5	21.4	22.2	22.1	22.2	22.1	22.0	22.0	22.1
94°	21.5	21.5	21.5	21.4	22.3	22.2	22.2	22.1	22.1	22.1	22.1
95°	21.5	21.5	21.5	21.4	22.4	22.3	22.3	22.2	22.2	22.2	22.2
96°	21.5	21.5	21.5	21.4	22.4	22.4	22.4	22.3	22.3	22.3	22.3
97°	21.5	21.5	21.5	21.5	22.5	22.4	22.5	22.4	22.4	22.3	22.4
98°	21.5	21.6	21.5	21.5	22.6	22.6	22.6	22.5	22.4	22.4	22.5
99°	21.5	21.6	21.5	21.5	22.7	22.6	22.6	22.6	22.6	22.5	22.6
100°	21.6	21.6	21.6	21.6	22.9	22.8	22.7	22.7	22.6	22.6	22.6
101°	21.6	21.7	21.6	21.6	23.0	22.9	22.9	22.8	22.8	22.8	22.8
102°	21.7	21.8	21.7	21.7	23.2	23.0	23.0	23.0	22.9	23.0	22.9
103°	21.8	21.8	21.8	21.8	23.3	23.2	23.1	23.1	23.0	23.1	23.0
104°	21.9	21.9	21.9	21.9	23.4	23.3	23.3	23.2	23.2	23.2	23.2
105°	22.0	22.0	22.0	22.0	23.7	23.5	23.5	23.4	23.3	23.3	23.4
106°	22.1	22.1	22.1	22.1	24.2	23.7	23.6	23.6	23.5	23.5	23.5
107°	22.2	22.2	22.3	22.2	24.5	23.9	23.8	23.8	23.7	23.7	23.7
108°	22.4	22.4	22.4	22.4	24.7	24.1	24.1	24.0	23.9	23.9	24.0
109°	22.6	22.6	22.6	22.6	24.8	24.4	24.3	24.2	24.1	24.2	24.2
110°	22.7	22.7	22.8	22.7	25.0	24.6	24.6	24.4	24.3	24.4	24.4
111°	22.9	22.9	23.0	23.0	25.2	24.9	24.8	24.7	24.6	24.6	24.6
112°	23.1	23.1	23.2	23.2	25.4	25.2	25.1	24.9	24.8	24.9	24.9
113°	23.4	23.4	23.4	23.4	25.7	25.4	25.3	25.2	25.1	25.2	25.2
114°	23.6	23.6	23.6	23.6	26.0	25.8	25.6	25.5	25.4	25.4	25.5
115°	23.8	23.8	23.9	23.8	26.3	26.1	25.9	25.8	25.6	25.7	25.8
116°	24.1	24.1	24.2	24.1	26.6	26.4	26.2	26.1	25.9	26.0	26.1
117°	24.4	24.3	24.4	24.4	26.9	26.6	26.6	26.5	26.2	26.4	26.4
118°	24.6	24.6	24.7	24.6	27.2	27.0	26.9	26.8	26.6	26.7	26.8
119°	24.9	24.9	25.0	24.9	27.5	27.2	27.2	27.1	26.8	27.0	27.1
120°	25.2	25.2	25.4	25.2	27.9	27.6	27.6	27.4	27.1	27.3	27.4
121°	25.5	25.5	25.7	25.6	28.2	27.9	27.9	27.7	27.4	27.6	27.8
122°	25.8	25.7	26.0	25.9	28.5	28.2	28.2	28.0	27.7	27.9	28.1
123°	26.1	26.0	26.3	26.2	28.8	28.5	28.4	28.3	28.0	28.2	28.4
124°	26.4	26.3	26.6	26.5	29.1	28.8	28.7	28.6	28.2	28.5	28.7
125°	26.7	26.6	26.9	26.8	29.4	29.1	29.0	28.9	28.5	28.8	29.0
126°	27.0	26.9	27.2	27.1	29.7	29.4	29.3	29.2	28.8	29.1	29.3
127°	27.3	27.2	27.5	27.4	30.0	29.7	29.6	29.5	29.1	29.4	29.6
128°	27.6	27.5	27.8	27.6	30.2	30.0	29.8	29.7	29.4	29.6	29.9
129°	27.9	27.8	28.1	27.9	30.4	30.2	30.1	30.0	29.6	29.9	30.1
130°	28.1	28.0	28.4	28.2	30.6	30.5	30.4	30.2	29.8	30.2	30.4
131°	28.4	28.3	28.7	28.4	30.8	30.8	30.7	30.5	30.0	30.5	30.7
132°	28.6	28.6	28.9	28.6	31.0	31.0	30.9	30.8	30.2	30.7	31.0
133°	28.8	28.8	29.1	28.9	31.3	31.2	31.2	31.0	30.5	30.9	31.2
134°	29.0	29.1	29.4	29.1	31.6	31.4	31.4	31.3	30.7	31.2	31.4



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	29.2	29.3	29.7	29.3	31.8	31.6	31.6	31.5	30.9	31.4	31.7
136°	29.4	29.5	29.9	29.6	32.1	31.9	31.8	31.6	31.2	31.6	31.9
137°	29.6	29.7	30.0	29.8	32.3	32.1	32.0	31.9	31.4	31.8	32.1
138°	29.8	30.0	30.2	30.0	32.5	32.3	32.1	32.1	31.6	32.1	32.3
139°	30.1	30.2	30.4	30.2	32.6	32.5	32.3	32.3	31.9	32.4	32.5
140°	30.3	30.4	30.6	30.4	32.7	32.8	32.5	32.5	32.2	32.5	32.8
141°	30.6	30.5	30.8	30.6	33.0	33.0	32.7	32.7	32.5	32.7	33.0
142°	30.8	30.7	31.0	30.8	33.2	33.2	32.9	33.0	32.7	32.9	33.3
143°	31.0	30.9	31.1	30.8	33.5	33.4	33.2	33.2	33.0	33.2	33.5
144°	31.2	31.1	31.3	31.0	33.9	33.7	33.4	33.4	33.2	33.4	33.8
145°	31.4	31.2	31.6	31.4	34.2	34.0	33.7	33.7	33.4	33.7	34.0
146°	31.6	31.5	31.8	31.8	34.4	34.3	33.9	33.9	33.6	34.0	34.3
147°	31.9	31.8	32.1	32.0	34.6	34.6	34.2	34.2	33.8	34.4	34.6
148°	32.2	32.0	32.4	32.3	34.8	34.9	34.5	34.5	34.0	34.7	34.9
149°	32.4	32.3	32.6	32.5	34.9	35.1	34.8	34.7	34.2	34.9	35.2
150°	32.7	32.6	33.0	32.7	35.1	35.3	35.0	35.0	34.4	35.2	35.4
151°	33.0	32.9	33.3	32.9	35.3	35.6	35.4	35.2	34.6	35.4	35.8
152°	33.3	33.2	33.6	33.1	35.5	35.8	35.7	35.4	34.8	35.6	36.1
153°	33.6	33.5	33.8	33.4	35.6	36.1	36.0	35.8	35.2	35.9	36.4
154°	34.0	33.9	34.0	33.7	35.8	36.4	36.2	36.0	35.4	36.2	36.7
155°	34.3	34.3	34.3	34.0	36.0	36.7	36.4	36.3	35.8	36.5	36.9
156°	34.7	34.6	34.6	34.4	36.2	36.8	36.7	36.6	36.1	36.8	37.1
157°	35.1	35.0	34.9	34.9	36.5	37.0	36.9	36.9	36.5	37.1	37.3
158°	35.4	35.3	35.2	35.3	36.8	37.3	37.3	37.2	36.8	37.3	37.7
159°	35.8	35.6	35.5	35.7	37.0	37.6	37.6	37.5	37.1	37.6	37.9
160°	36.1	35.9	35.8	36.0	37.2	37.8	37.8	37.7	37.4	37.7	38.1
161°	36.5	36.2	36.1	36.3	37.5	38.0	38.1	38.0	37.6	37.9	38.4
162°	36.8	36.5	36.4	36.7	37.9	38.2	38.3	38.2	37.9	38.2	38.6
163°	37.1	36.7	36.7	37.0	38.1	38.4	38.6	38.5	38.1	38.3	38.8
164°	37.5	36.9	37.0	37.3	38.3	38.5	38.7	38.6	38.3	38.4	39.0
165°	37.8	37.2	37.2	37.6	38.5	38.6	38.9	38.8	38.4	38.6	39.2
166°	38.1	37.3	37.5	37.9	38.7	38.8	39.1	38.9	38.6	38.7	39.3
167°	38.3	37.5	37.8	38.1	38.8	38.8	39.1	39.0	38.7	38.8	39.3
168°	38.5	37.7	37.9	38.3	38.8	38.8	39.0	39.0	38.6	38.7	39.1
169°	38.6	37.8	38.0	38.5	38.7	38.8	38.8	39.0	38.6	38.6	38.9
170°	38.6	37.8	38.1	38.6	38.6	38.8	38.7	38.8	38.4	38.5	38.7
171°	38.6	37.9	38.2	38.7	38.6	38.6	38.6	38.6	38.3	38.4	38.5
172°	38.6	38.0	38.4	38.8	38.5	38.5	38.5	38.5	38.2	38.2	38.4
173°	38.7	38.1	38.5	39.0	38.4	38.3	38.5	38.3	38.1	38.0	38.3
174°	38.8	38.3	38.6	39.0	38.5	38.3	38.6	38.3	38.2	38.0	38.4
175°	38.8	38.4	38.6	39.1	38.6	38.3	38.6	38.4	38.2	38.0	38.5
176°	38.9	38.5	38.7	39.0	38.6	38.3	38.6	38.4	38.3	38.0	38.5
177°	38.8	38.4	38.7	39.0	38.6	38.3	38.6	38.5	38.3	38.1	38.5
178°	38.8	38.3	38.7	38.8	38.7	38.3	38.7	38.5	38.4	38.1	38.5
179°	38.7	38.3	38.6	38.7	38.8	38.4	38.8	38.6	38.5	38.2	38.5



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	5691.2	5691.2	5691.2	5691.2	5691.2	5691.2
1°	5703.2	5702.4	5701.2	5700.0	5699.6	5698.8
2°	5701.6	5699.7	5698.1	5695.3	5694.5	5693.3
3°	5698.0	5695.5	5693.0	5689.6	5688.2	5685.8
4°	5692.2	5689.4	5686.4	5681.8	5679.6	5677.0
5°	5685.1	5681.6	5677.7	5672.1	5670.0	5666.7
6°	5676.2	5672.1	5667.8	5661.0	5658.5	5654.5
7°	5665.4	5661.0	5656.1	5648.3	5646.0	5641.0
8°	5653.5	5648.2	5643.4	5633.8	5631.2	5625.8
9°	5639.1	5633.2	5628.4	5618.3	5615.3	5609.4
10°	5623.0	5617.7	5611.7	5601.0	5598.1	5591.8
11°	5604.8	5599.5	5593.8	5583.1	5578.9	5572.1
12°	5585.6	5579.7	5574.2	5562.2	5558.7	5550.5
13°	5564.1	5558.3	5553.0	5539.6	5535.8	5527.8
14°	5540.5	5535.6	5530.4	5515.8	5511.6	5503.5
15°	5515.5	5510.9	5505.4	5490.9	5485.8	5477.1
16°	5488.8	5484.3	5478.8	5463.4	5458.6	5449.9
17°	5461.2	5456.3	5450.9	5434.8	5429.3	5420.3
18°	5430.7	5425.6	5421.1	5404.1	5398.6	5389.0
19°	5398.7	5394.3	5388.6	5371.5	5365.1	5355.7
20°	5364.3	5360.1	5355.2	5336.9	5330.5	5320.0
21°	5327.6	5324.4	5318.8	5300.4	5293.2	5282.1
22°	5289.0	5285.8	5280.7	5261.5	5253.7	5242.2
23°	5248.2	5245.5	5240.2	5220.3	5212.6	5200.1
24°	5204.5	5202.7	5197.4	5177.9	5170.0	5155.9
25°	5158.6	5157.3	5152.5	5132.0	5123.6	5109.4
26°	5110.8	5110.4	5105.5	5084.4	5075.5	5060.6
27°	5060.8	5059.6	5056.0	5034.0	5026.1	5010.4
28°	5008.4	5008.0	5004.4	4982.8	4974.5	4957.8
29°	4954.6	4954.3	4951.2	4929.0	4920.0	4902.4
30°	4897.2	4896.8	4894.6	4871.6	4862.6	4844.1
31°	4839.1	4837.8	4836.1	4811.8	4803.0	4786.0
32°	4776.3	4774.4	4773.8	4749.3	4741.0	4722.3
33°	4712.0	4710.4	4709.4	4684.4	4675.6	4656.0
34°	4644.5	4643.2	4641.2	4616.1	4606.8	4588.2
35°	4574.2	4571.6	4571.2	4545.4	4535.5	4516.2
36°	4501.3	4497.7	4498.3	4471.9	4461.4	4442.4
37°	4424.7	4419.5	4420.8	4393.4	4383.7	4365.6
38°	4344.4	4339.0	4341.2	4313.7	4302.7	4284.1
39°	4262.7	4255.2	4257.0	4227.2	4218.0	4200.8
40°	4176.9	4168.8	4171.3	4140.0	4131.2	4113.1
41°	4088.5	4078.7	4079.9	4047.0	4038.8	4021.4
42°	3994.9	3983.7	3986.7	3950.0	3945.7	3926.7
43°	3897.4	3886.5	3891.1	3849.6	3849.2	3830.1
44°	3798.5	3784.8	3787.9	3746.5	3746.8	3727.0



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	3694.6	3680.4	3683.2	3639.3	3642.8	3619.7
46°	3588.9	3574.5	3576.4	3530.2	3534.4	3509.0
47°	3478.4	3464.4	3466.4	3419.5	3422.7	3394.0
48°	3367.5	3352.3	3351.6	3303.1	3308.0	3275.2
49°	3252.8	3234.4	3233.1	3186.2	3185.8	3151.9
50°	3135.6	3115.9	3112.8	3063.0	3064.5	3028.4
51°	3013.5	2991.9	2987.3	2936.9	2936.6	2901.1
52°	2886.2	2862.7	2858.2	2805.6	2808.5	2770.6
53°	2753.2	2728.5	2721.9	2669.4	2667.5	2636.6
54°	2613.2	2589.0	2575.5	2530.0	2526.4	2497.3
55°	2471.3	2444.0	2429.2	2380.4	2385.0	2353.3
56°	2320.9	2292.7	2286.2	2226.8	2232.6	2203.8
57°	2164.6	2137.7	2133.2	2069.1	2078.0	2045.8
58°	2002.8	1977.1	1974.1	1907.0	1910.4	1880.8
59°	1838.5	1820.4	1812.6	1744.5	1740.4	1708.6
60°	1670.1	1656.5	1645.1	1582.2	1564.8	1535.0
61°	1504.5	1493.2	1478.6	1421.2	1393.0	1361.1
62°	1345.5	1330.1	1319.2	1266.2	1228.6	1198.6
63°	1191.4	1173.3	1166.4	1136.8	1071.2	1061.7
64°	1061.6	1044.8	1022.4	1000.1	932.2	924.9
65°	932.4	916.7	896.4	863.2	812.9	788.0
66°	803.2	788.6	783.1	750.8	707.8	678.4
67°	696.7	682.9	678.9	641.4	609.8	578.3
68°	599.9	584.1	583.1	545.8	520.4	490.3
69°	515.2	499.4	497.7	462.5	446.2	420.4
70°	441.0	423.6	424.6	394.6	376.8	359.8
71°	380.1	365.3	366.1	337.6	320.2	305.2
72°	322.3	315.7	305.6	285.0	276.3	263.2
73°	273.6	270.2	264.0	237.4	232.5	227.5
74°	224.2	230.6	222.3	199.7	188.7	192.0
75°	188.5	190.6	180.7	167.6	156.8	161.3
76°	158.4	164.0	150.2	142.8	129.3	137.6
77°	133.7	142.1	127.6	122.9	110.3	120.8
78°	117.4	122.5	109.8	107.3	95.6	104.2
79°	101.1	105.8	93.8	91.8	82.7	87.6
80°	84.8	89.2	80.1	78.4	70.8	75.1
81°	73.2	75.9	68.4	66.5	61.3	64.3
82°	62.5	63.7	57.6	55.8	52.2	53.8
83°	52.2	52.4	47.6	45.2	43.6	43.7
84°	42.4	41.4	38.0	36.0	35.7	35.0
85°	34.7	32.7	31.6	30.3	30.6	30.0
86°	30.0	28.3	28.0	27.0	27.4	26.5
87°	26.5	24.9	24.6	23.7	23.7	23.4
88°	23.6	23.1	23.0	22.8	22.8	22.6
89°	22.8	22.4	22.2	22.0	21.9	21.7



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	22.0	21.6	21.6	21.6	21.6	21.5
91°	22.0	21.6	21.6	21.6	21.5	21.5
92°	22.0	21.6	21.6	21.5	21.5	21.5
93°	22.0	21.6	21.6	21.5	21.5	21.5
94°	22.1	21.6	21.6	21.5	21.5	21.5
95°	22.2	21.6	21.6	21.5	21.5	21.5
96°	22.3	21.6	21.6	21.5	21.5	21.5
97°	22.4	21.6	21.6	21.5	21.6	21.5
98°	22.4	21.6	21.6	21.6	21.6	21.5
99°	22.6	21.6	21.6	21.6	21.6	21.5
100°	22.7	21.7	21.7	21.6	21.7	21.6
101°	22.8	21.7	21.8	21.7	21.8	21.6
102°	22.9	21.8	21.8	21.8	21.9	21.7
103°	23.1	21.9	21.9	21.8	21.9	21.8
104°	23.2	22.0	22.0	22.0	21.9	21.9
105°	23.4	22.2	22.1	22.1	22.0	22.0
106°	23.6	22.4	22.2	22.2	22.2	22.1
107°	23.8	22.5	22.4	22.3	22.3	22.2
108°	24.0	22.7	22.5	22.5	22.4	22.4
109°	24.2	22.9	22.7	22.6	22.6	22.6
110°	24.5	23.1	22.8	22.8	22.8	22.7
111°	24.7	23.3	23.1	23.0	23.0	22.9
112°	25.0	23.5	23.3	23.2	23.2	23.1
113°	25.2	23.8	23.6	23.5	23.4	23.4
114°	25.5	24.0	23.8	23.7	23.6	23.6
115°	25.8	24.2	24.1	24.0	23.9	23.8
116°	26.2	24.4	24.4	24.2	24.1	24.1
117°	26.6	24.7	24.6	24.5	24.4	24.4
118°	26.8	24.9	24.9	24.8	24.7	24.6
119°	27.1	25.2	25.1	25.1	25.0	24.9
120°	27.4	25.5	25.4	25.4	25.2	25.2
121°	27.8	25.8	25.6	25.7	25.5	25.5
122°	28.1	26.1	25.9	26.0	25.8	25.8
123°	28.4	26.3	26.2	26.3	26.1	26.1
124°	28.7	26.6	26.5	26.6	26.4	26.4
125°	29.1	26.8	26.8	26.9	26.7	26.7
126°	29.4	27.1	27.1	27.2	27.0	27.0
127°	29.7	27.4	27.4	27.5	27.3	27.3
128°	30.0	27.6	27.6	27.7	27.6	27.6
129°	30.3	27.9	27.9	28.0	27.8	27.9
130°	30.6	28.1	28.1	28.3	28.1	28.1
131°	30.9	28.3	28.4	28.6	28.4	28.4
132°	31.2	28.5	28.6	28.8	28.6	28.6
133°	31.4	28.7	28.8	29.1	28.9	28.8
134°	31.6	28.9	29.1	29.3	29.1	29.0



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	31.8	29.1	29.3	29.6	29.2	29.2
136°	32.0	29.3	29.5	29.8	29.5	29.4
137°	32.1	29.6	29.7	30.0	29.7	29.6
138°	32.3	29.8	29.9	30.1	29.9	29.8
139°	32.5	30.0	30.2	30.4	30.1	30.1
140°	32.8	30.2	30.4	30.6	30.3	30.3
141°	33.0	30.4	30.6	30.8	30.4	30.6
142°	33.2	30.5	30.8	31.0	30.6	30.8
143°	33.4	30.8	31.0	31.2	30.8	31.0
144°	33.7	31.0	31.2	31.4	30.9	31.2
145°	34.0	31.3	31.4	31.7	31.1	31.4
146°	34.4	31.5	31.8	31.9	31.4	31.6
147°	34.7	31.7	32.1	32.2	31.7	31.9
148°	35.0	31.8	32.3	32.4	32.0	32.2
149°	35.2	32.0	32.5	32.8	32.3	32.4
150°	35.4	32.2	32.7	33.1	32.6	32.7
151°	35.6	32.5	32.9	33.4	32.9	33.0
152°	35.7	32.8	33.1	33.7	33.2	33.3
153°	36.0	33.1	33.3	33.9	33.5	33.6
154°	36.3	33.3	33.6	34.1	33.9	34.0
155°	36.6	33.6	34.0	34.3	34.3	34.3
156°	36.8	34.0	34.3	34.5	34.7	34.7
157°	37.1	34.4	34.7	34.8	35.2	35.1
158°	37.3	34.8	35.0	35.1	35.6	35.4
159°	37.6	35.1	35.3	35.4	35.9	35.8
160°	37.8	35.5	35.6	35.8	36.3	36.1
161°	38.0	35.9	35.9	36.1	36.6	36.5
162°	38.2	36.2	36.2	36.5	37.0	36.8
163°	38.3	36.6	36.5	36.8	37.3	37.1
164°	38.5	36.9	36.8	37.1	37.6	37.5
165°	38.6	37.2	37.0	37.4	37.9	37.8
166°	38.7	37.5	37.2	37.6	38.2	38.1
167°	38.8	37.6	37.5	37.9	38.5	38.3
168°	38.8	37.8	37.7	38.1	38.7	38.5
169°	38.8	38.0	37.8	38.2	38.9	38.6
170°	38.8	38.1	37.9	38.2	39.0	38.6
171°	38.7	38.2	38.0	38.4	39.0	38.6
172°	38.6	38.3	38.1	38.6	39.2	38.6
173°	38.4	38.4	38.2	38.7	39.3	38.7
174°	38.4	38.6	38.4	38.8	39.4	38.8
175°	38.4	38.8	38.5	38.9	39.5	38.8
176°	38.4	38.8	38.6	39.0	39.4	38.9
177°	38.4	38.9	38.6	39.0	39.3	38.8
178°	38.4	38.8	38.6	38.9	39.1	38.8
179°	38.4	38.8	38.6	39.0	39.1	38.7



TEST NUMBER: P295273

CATALOG NUMBER: UHB-12-UNV-L850-CD-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	38.5	38.5	38.5	38.5	38.5	38.5

(END OF REPORT)