

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: McGRAW-EDISON

Report Number: P158855

Luminaire Tested: **VTS-F12-LED-E1-SLL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158855
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33715)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VTS-F12-LED-E1-SLL
Description: VENTUS LED SITE LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (84) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

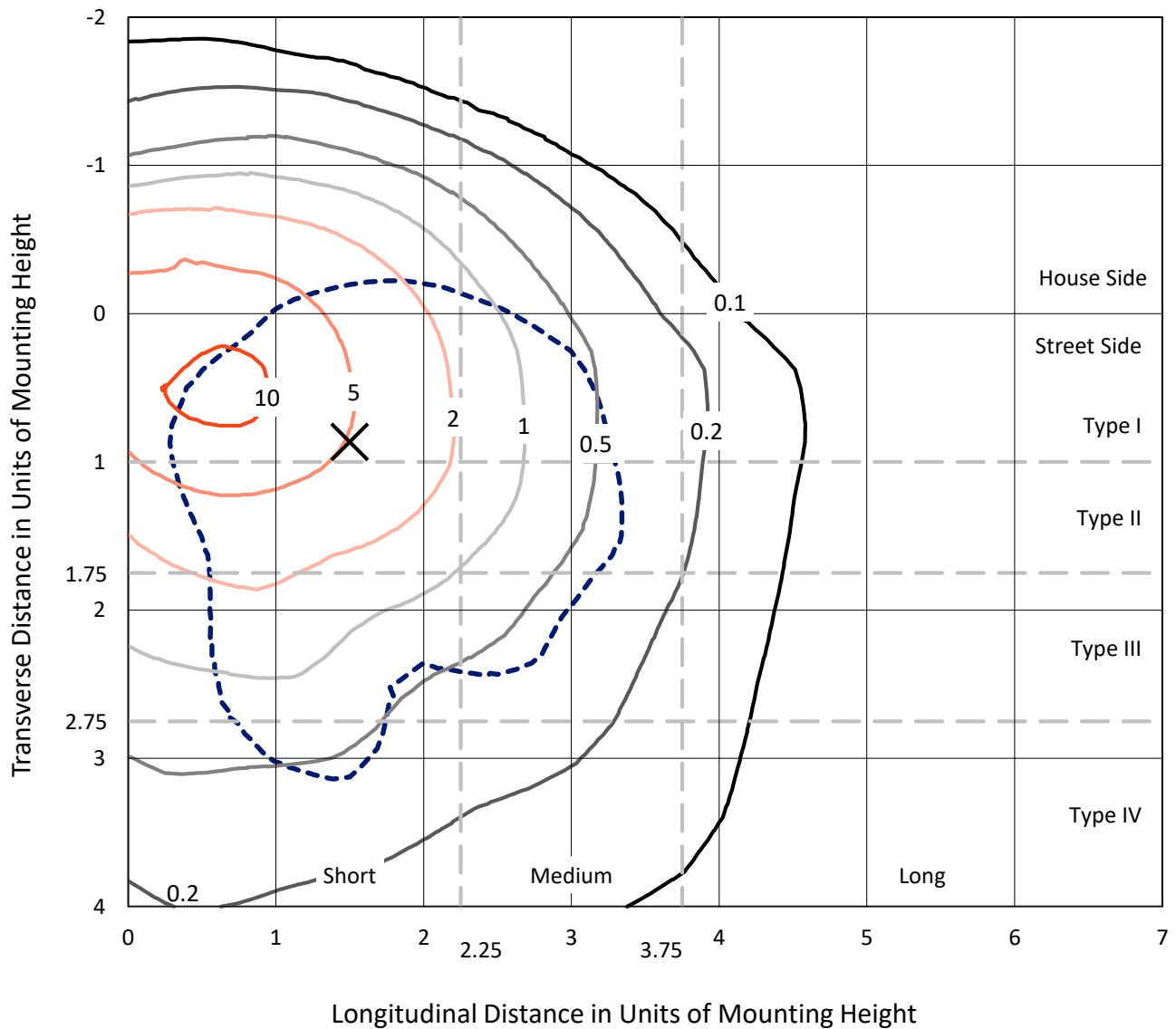
Lumens per Lamp: N/A
Luminaire Lumens: 26621 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 306.6
Input Voltage (V): NR
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

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Iso-Footcandle Lines of Horizontal Illumination

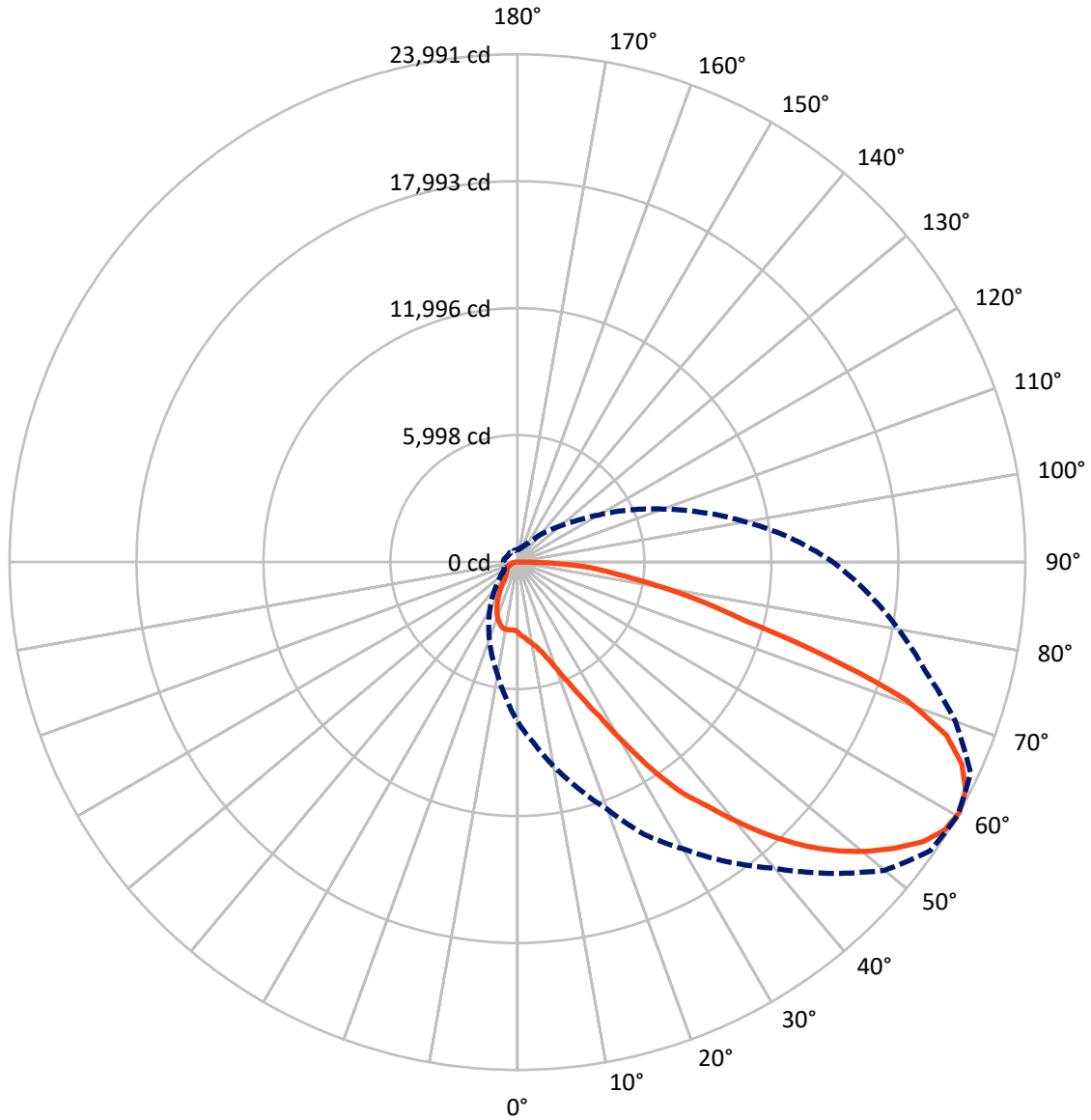
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5994.2	0.0	5994.2
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	20626.8	0.0	20626.8
	% Fixture	77.5	0.0	77.5
Total	Lumens	26621.0	0.0	26621.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.6	1.2
10°-20°	1054.6	4.0
20°-30°	2001.2	7.5
30°-40°	3151.5	11.8
40°-50°	4398.8	16.5
50°-60°	5440.2	20.4
60°-70°	5639.1	21.2
70°-80°	3548.3	13.3
80°-90°	1060.7	4.0
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°-90°	26621.0	100.0
0°-180°	26621.0	100.0



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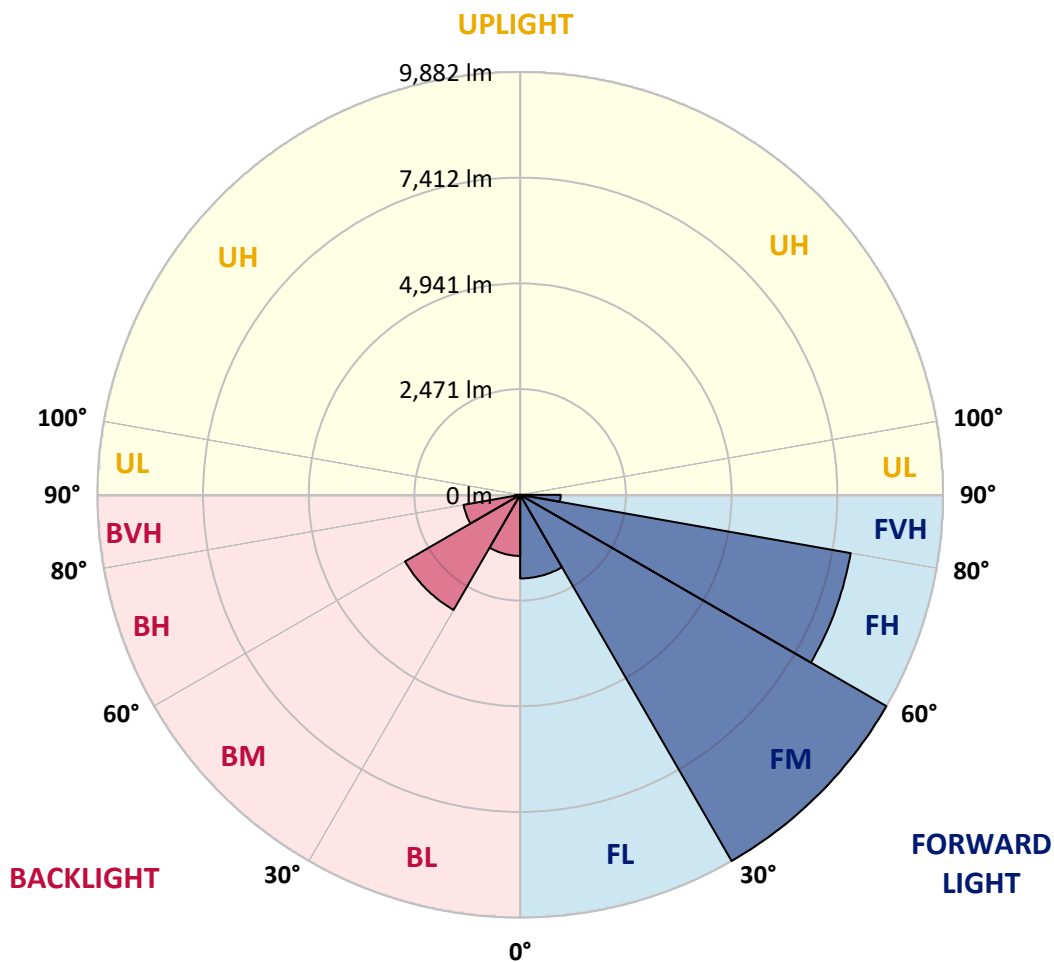
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1954.4	7.3			
FM	(30°-60°)	9882.1	37.1			
FH	(60°-80°)	7845.0	29.5			G4/12000
FVH	(80°-90°)	945.3	3.6			G5
BL	(0°-30°)	1428.0	5.4	B3/2500		
BM	(30°-60°)	3108.4	11.7	B3/5000		
BH	(60°-80°)	1342.4	5.0	B3/2500		G3/2500
BVH	(80°-90°)	115.4	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7
2.5°	3506.8	3502.9	3502.9	3502.9	3500.9	3496.9	3502.9	3500.9	3491.0	3485.0	3491.0
5°	3552.4	3554.4	3560.3	3562.3	3562.3	3568.2	3584.1	3586.1	3584.1	3588.1	3598.0
7.5°	3596.0	3605.9	3611.8	3621.7	3633.6	3643.5	3671.3	3699.0	3716.8	3730.7	3734.7
10°	3667.3	3683.2	3701.0	3726.7	3754.5	3804.0	3827.8	3855.5	3873.4	3901.1	3907.0
12.5°	3849.6	3869.4	3881.3	3920.9	3956.6	4004.1	4037.8	4045.7	4087.3	4111.1	4138.9
15°	4156.7	4186.4	4228.0	4251.8	4291.4	4333.0	4362.7	4402.4	4408.3	4440.0	4461.8
17.5°	4533.1	4574.7	4659.9	4717.4	4768.9	4810.5	4869.9	4915.5	4925.4	4961.1	4915.5
20°	5060.1	5161.2	5175.1	5290.0	5335.5	5418.7	5537.6	5559.4	5616.9	5559.4	5525.7
22.5°	5773.4	5931.9	5975.5	6086.4	6141.9	6268.7	6304.4	6421.3	6460.9	6417.3	6326.2
25°	6593.6	6839.3	6966.1	7136.5	7164.2	7423.8	7451.5	7588.2	7514.9	7409.9	7411.9
27.5°	7197.9	7616.0	7942.9	8234.1	8438.2	8731.4	8959.3	9022.7	8953.3	8816.6	8769.1
30°	7542.7	8016.2	8485.7	8887.9	9363.4	9811.2	10276.8	10508.6	10548.2	10619.6	10332.3
32.5°	7764.6	8372.8	8931.5	9428.8	9916.2	10492.8	11116.8	11713.2	12214.5	12592.9	12414.6
35°	7950.8	8701.7	9416.9	10019.2	10595.8	11223.8	11853.9	12557.2	13387.4	13872.8	13973.8
37.5°	8026.1	8943.4	9819.1	10591.8	11402.2	12109.5	12735.5	13361.6	14233.4	15099.2	15366.7
40°	8012.2	9062.3	10058.9	11029.7	12022.3	12905.9	13639.0	14380.0	15400.3	16412.8	16848.6
42.5°	7919.1	9080.1	10211.4	11320.9	12452.2	13627.1	14564.2	15418.2	16396.9	17694.6	18310.8
45°	7802.2	9018.7	10243.1	11469.5	12771.2	14130.3	15315.1	16371.1	17518.3	18800.2	19545.1
47.5°	7643.7	8921.6	10203.5	11521.0	12913.9	14453.3	15846.1	17116.1	18378.2	19854.2	20799.3
50°	7471.3	8782.9	10122.3	11483.4	12949.5	14629.6	16149.2	17595.6	19069.6	20662.6	21857.3
52.5°	7350.5	8634.3	10048.9	11406.1	12913.9	14683.1	16260.2	17853.1	19493.6	21140.0	22566.5
55°	7201.9	8436.2	9852.8	11225.8	12783.1	14653.4	16248.3	17942.3	19610.5	21324.3	22952.9
57.5°	7211.8	8345.1	9686.4	11009.9	12515.6	14378.0	16024.4	17853.1	19426.3	21205.4	22966.8
60°	7524.8	8541.2	9773.6	11053.4	12436.4	14203.7	15644.0	17278.6	18885.4	20795.3	22645.8
62.5°	8170.7	9101.9	10221.3	11489.3	12882.2	14552.4	15471.7	16323.6	17750.1	20040.4	22099.0
65°	8941.4	9781.5	10752.3	11958.9	13520.1	15119.0	15374.6	15546.9	16268.1	18572.3	21072.7
67.5°	9712.1	10463.0	11225.8	12226.4	13882.7	15281.5	14978.3	14568.2	14956.5	16866.5	19055.8
70°	9989.5	10986.1	11487.3	12174.8	13607.3	14903.0	14338.4	13306.1	13440.9	15176.5	16777.3
72.5°	9573.4	10994.0	11160.4	11416.0	12380.9	13599.4	13003.0	11675.6	11647.8	12973.3	14267.1
75°	8030.0	10029.1	10027.2	9932.1	10150.0	10843.4	10534.4	9733.9	10072.7	11116.8	11542.8
77.5°	5723.9	7826.0	7925.0	7285.1	7269.2	7582.3	7768.5	8699.7	9928.1	10514.5	10379.8
80°	3596.0	5280.1	5706.0	4915.5	4747.1	5190.9	6342.0	7697.2	9208.9	9735.9	9282.2
82.5°	2165.5	3401.8	4309.2	3861.5	3821.9	4630.2	5902.2	6429.2	6882.9	7443.6	6684.8
85°	1470.1	2266.6	2948.1	3037.3	3384.0	4220.1	4772.9	4539.1	4551.0	4404.3	4012.1
87.5°	281.3	618.2	1010.4	1232.3	1367.1	1836.6	1997.1	1808.9	1909.9	1396.8	1527.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7
2.5°	3481.1	3481.1	3481.1	3471.2	3473.1	3459.3	3453.3	3453.3	3447.4	3447.4	3445.4
5°	3590.0	3578.2	3584.1	3582.1	3582.1	3562.3	3552.4	3552.4	3526.6	3528.6	3520.7
7.5°	3752.5	3750.5	3756.5	3744.6	3728.7	3712.9	3697.0	3689.1	3653.4	3631.6	3617.8
10°	3936.8	3934.8	3940.7	3938.7	3911.0	3881.3	3837.7	3806.0	3762.4	3728.7	3695.0
12.5°	4138.9	4136.9	4132.9	4115.1	4085.4	4037.8	3982.3	3928.8	3863.5	3819.9	3770.3
15°	4453.9	4447.9	4424.2	4398.4	4366.7	4293.4	4196.3	4119.0	4031.9	3956.6	3875.3
17.5°	4919.5	4869.9	4866.0	4808.5	4723.3	4626.2	4535.1	4406.3	4281.5	4168.6	4057.6
20°	5561.4	5446.5	5414.8	5349.4	5236.5	5135.4	4937.3	4764.9	4594.5	4440.0	4299.3
22.5°	6260.8	6177.6	6100.3	5993.3	5838.8	5692.2	5440.5	5224.6	5006.6	4808.5	4652.0
25°	7237.5	7092.9	6954.2	6783.8	6569.9	6395.5	6108.2	5890.3	5605.0	5424.7	5198.8
27.5°	8499.6	8251.9	8018.2	7871.5	7495.1	7241.5	6875.0	6593.6	6248.9	6005.2	5737.7
30°	10142.1	9854.8	9508.1	9000.9	8553.1	8049.9	7596.2	7235.6	6869.0	6528.3	6219.2
32.5°	12178.8	11671.6	11122.8	10318.4	9583.4	8866.1	8261.9	7818.1	7443.6	7019.6	6583.7
35°	13900.5	13377.5	12598.8	11576.5	10669.1	9848.8	9125.7	8519.4	8030.0	7493.1	6916.6
37.5°	15259.7	14663.3	13932.2	12846.5	11887.6	10954.4	10195.6	9422.9	8780.9	8041.9	7312.8
40°	16816.9	16218.6	15414.2	14288.8	13153.6	12141.2	11251.6	10453.1	9664.6	8763.1	7826.0
42.5°	18174.1	17742.2	16927.9	15764.9	14506.8	13379.4	12406.6	11493.3	10463.0	9454.6	8345.1
45°	19588.7	19148.9	18376.2	17159.7	15822.3	14566.2	13403.2	12420.5	11204.0	10003.4	8733.4
47.5°	20838.9	20387.2	19606.5	18398.0	16977.4	15653.9	14374.0	13185.3	11772.6	10393.7	8987.0
50°	22031.6	21478.8	20763.6	19559.0	18041.4	16626.7	15237.9	13712.3	12214.5	10667.1	9159.4
52.5°	23127.2	22423.9	21746.3	20506.0	18865.6	17387.5	15838.2	14160.1	12485.9	10883.1	9276.3
55°	23749.4	23295.7	22485.3	21266.8	19452.0	17910.6	16218.6	14475.1	12755.4	11035.6	9325.8
57.5°	23941.5	23830.6	23151.0	21706.7	19796.7	18197.9	16476.2	14724.7	12935.6	11079.2	9256.4
60°	23789.0	23991.1	23618.6	22015.8	19953.3	18283.1	16603.0	14903.0	12967.3	10940.5	9046.4
62.5°	23299.6	23759.3	23711.7	22118.8	19872.0	18176.1	16589.1	14811.9	12670.2	10508.6	8574.9
65°	22495.2	23073.8	23277.8	21736.4	19414.4	17785.8	16236.4	14239.3	11844.0	9664.6	7784.4
67.5°	20981.5	21857.3	22055.4	20484.2	18217.7	16706.0	15220.0	13050.6	10314.4	8358.9	6550.0
70°	17948.2	19479.7	19747.2	18098.8	16107.6	14780.2	13520.1	11166.4	8588.8	6704.6	5026.5
72.5°	14328.5	15291.4	15838.2	14702.9	13220.9	12258.1	11303.1	8567.0	6480.7	4947.2	3459.3
75°	11202.0	11144.6	11634.0	10879.1	10007.3	9557.6	8840.4	5977.5	4340.9	3277.0	2189.3
77.5°	9577.4	8840.4	8283.6	7752.7	7235.6	7092.9	6405.4	3708.9	2682.6	1963.4	1309.6
80°	7960.7	6615.4	5599.0	4852.1	4667.8	4949.2	4192.3	2187.3	1589.0	1127.3	822.2
82.5°	5688.2	4759.0	3873.4	3399.8	3084.8	3532.6	2472.6	1214.5	861.8	675.6	544.8
85°	3687.1	3524.7	3487.0	3332.5	2950.1	2785.7	1878.2	1046.1	645.9	420.0	338.8
87.5°	1418.6	1818.8	2098.2	2248.7	2431.0	2165.5	978.7	360.6	354.6	217.9	164.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7
2.5°	3431.5	3423.6	3421.6	3415.7	3411.7	3411.7	3401.8	3221.5	3219.5	3219.5	3217.6
5°	3504.8	3494.9	3485.0	3483.1	3475.1	3475.1	3465.2	3284.9	3284.9	3284.9	3281.0
7.5°	3603.9	3584.1	3572.2	3566.3	3554.4	3560.3	3568.2	3386.0	3388.0	3386.0	3389.9
10°	3675.2	3663.3	3649.5	3645.5	3637.6	3643.5	3655.4	3475.1	3481.1	3483.1	3487.0
12.5°	3744.6	3724.8	3706.9	3701.0	3697.0	3712.9	3726.7	3552.4	3558.3	3564.3	3564.3
15°	3829.8	3796.1	3772.3	3758.4	3750.5	3766.4	3786.2	3613.8	3615.8	3621.7	3619.8
17.5°	3974.4	3924.9	3869.4	3859.5	3833.7	3839.7	3843.6	3651.5	3643.5	3629.7	3605.9
20°	4198.3	4123.0	4047.7	4016.0	3964.5	3942.7	3899.1	3653.4	3603.9	3562.3	3526.6
22.5°	4519.3	4408.3	4327.1	4273.6	4168.6	4095.3	3976.4	3643.5	3550.4	3479.1	3423.6
25°	5038.3	4905.6	4780.8	4646.1	4481.6	4335.0	4160.6	3730.7	3586.1	3463.2	3356.3
27.5°	5543.6	5333.6	5141.4	4939.3	4707.5	4487.6	4241.9	3758.4	3594.0	3435.5	3261.2
30°	5922.0	5616.9	5325.6	5030.4	4727.3	4442.0	4164.6	3663.3	3467.2	3288.9	3104.6
32.5°	6151.8	5755.6	5377.1	5010.6	4654.0	4333.0	4022.0	3498.9	3282.9	3072.9	2876.8
35°	6369.8	5878.4	5408.8	4976.9	4568.8	4212.2	3877.3	3306.7	3049.2	2825.3	2577.6
37.5°	6639.2	6007.2	5428.7	4915.5	4444.0	4035.8	3667.3	3065.0	2807.4	2532.1	2298.3
40°	6962.1	6139.9	5408.8	4792.7	4249.8	3804.0	3413.7	2811.4	2524.1	2256.7	2026.8
42.5°	7269.2	6256.8	5357.3	4628.2	4037.8	3562.3	3181.9	2585.5	2298.3	2024.8	1797.0
45°	7497.1	6355.9	5331.6	4513.3	3875.3	3397.9	2977.8	2403.3	2100.1	1824.7	1592.9
47.5°	7655.6	6415.3	5319.7	4449.9	3762.4	3227.5	2791.6	2221.0	1902.0	1624.6	1398.8
50°	7738.8	6413.3	5290.0	4380.6	3596.0	3023.4	2599.4	2036.7	1719.7	1448.3	1242.2
52.5°	7760.6	6377.7	5226.6	4253.8	3393.9	2819.3	2393.4	1844.6	1559.3	1299.7	1091.7
55°	7711.1	6290.5	5093.8	4041.8	3177.9	2603.4	2205.1	1694.0	1402.7	1157.1	994.6
57.5°	7570.4	6136.0	4844.2	3750.5	2950.1	2403.3	1989.2	1511.7	1232.3	1026.3	891.6
60°	7308.9	5809.1	4453.9	3405.8	2660.8	2098.2	1692.0	1274.0	1052.0	897.5	788.5
62.5°	6825.4	5295.9	3905.1	2930.3	2244.8	1701.9	1351.2	1016.4	850.0	748.9	681.6
65°	6046.8	4523.2	3269.1	2308.2	1705.9	1238.3	1004.5	764.8	643.9	582.5	562.7
67.5°	4935.3	3493.0	2377.5	1602.8	1155.1	867.8	699.4	558.7	501.3	477.5	469.6
70°	3588.1	2379.5	1539.4	1012.4	762.8	606.3	529.0	449.7	418.0	412.1	412.1
72.5°	2252.7	1446.3	943.1	693.4	578.5	491.4	451.7	396.3	384.4	380.4	374.5
75°	1321.5	877.7	667.7	568.6	495.3	439.8	406.2	360.6	352.7	350.7	344.7
77.5°	842.0	632.0	538.9	485.4	447.8	398.2	368.5	321.0	319.0	317.0	315.0
80°	604.3	525.0	471.5	429.9	392.3	346.7	328.9	291.2	287.3	285.3	289.3
82.5°	457.7	433.9	412.1	380.4	328.9	295.2	281.3	255.6	257.6	247.7	245.7
85°	315.0	311.1	309.1	295.2	257.6	227.8	217.9	204.1	214.0	204.1	192.2
87.5°	154.5	152.6	140.7	166.4	154.5	122.8	111.0	122.8	136.7	132.7	122.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P158855

CATALOG NUMBER: VTS-F12-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7
2.5°	3209.6	3201.7	3207.7	3203.7	3203.7	3201.7	3205.7	3199.7	3195.8	3199.7	3201.7
5°	3273.0	3263.1	3265.1	3251.2	3257.2	3243.3	3247.3	3237.4	3227.5	3223.5	3223.5
7.5°	3380.0	3370.1	3358.2	3356.3	3334.5	3326.5	3312.7	3304.7	3298.8	3284.9	3277.0
10°	3477.1	3461.3	3447.4	3445.4	3423.6	3403.8	3386.0	3370.1	3360.2	3340.4	3330.5
12.5°	3556.4	3540.5	3518.7	3506.8	3485.0	3461.3	3449.4	3425.6	3411.7	3389.9	3372.1
15°	3601.9	3574.2	3542.5	3520.7	3489.0	3463.2	3445.4	3427.6	3413.7	3386.0	3360.2
17.5°	3580.1	3534.6	3491.0	3451.4	3407.8	3384.0	3358.2	3336.4	3332.5	3300.8	3261.2
20°	3489.0	3435.5	3378.0	3324.6	3267.1	3233.4	3201.7	3168.0	3158.1	3120.5	3069.0
22.5°	3378.0	3316.6	3251.2	3185.9	3112.6	3065.0	3017.5	2975.9	2942.2	2886.7	2813.4
25°	3265.1	3174.0	3078.9	2995.7	2910.5	2851.0	2801.5	2755.9	2716.3	2627.2	2551.9
27.5°	3116.5	2973.9	2876.8	2781.7	2678.7	2601.4	2545.9	2482.5	2438.9	2335.9	2256.7
30°	2926.3	2783.7	2645.0	2549.9	2446.9	2363.6	2292.3	2201.2	2137.8	2062.5	1989.2
32.5°	2686.6	2543.9	2403.3	2296.3	2211.1	2108.1	2018.9	1931.7	1858.4	1785.1	1727.7
35°	2395.3	2256.7	2123.9	2016.9	1921.8	1840.6	1755.4	1680.1	1596.9	1517.6	1484.0
37.5°	2088.2	1939.7	1793.0	1699.9	1624.6	1567.2	1487.9	1426.5	1351.2	1303.7	1264.0
40°	1820.8	1662.3	1523.6	1444.3	1384.9	1319.5	1254.1	1206.6	1153.1	1105.5	1075.8
42.5°	1594.9	1446.3	1327.4	1260.1	1188.8	1117.4	1067.9	1028.3	994.6	958.9	923.3
45°	1386.9	1244.2	1145.2	1062.0	1002.5	945.1	911.4	893.5	873.7	851.9	828.2
47.5°	1212.5	1089.7	992.6	915.3	853.9	814.3	798.4	792.5	784.6	766.7	754.9
50°	1079.8	978.7	879.7	810.3	758.8	739.0	721.2	715.2	705.3	699.4	691.5
52.5°	968.8	861.8	778.6	715.2	683.5	675.6	667.7	659.8	657.8	653.8	649.9
55°	877.7	784.6	707.3	659.8	643.9	638.0	636.0	628.1	626.1	626.1	620.1
57.5°	796.5	717.2	647.9	618.2	608.2	602.3	598.3	594.4	594.4	598.3	596.4
60°	713.3	645.9	604.3	588.4	582.5	572.6	562.7	558.7	560.7	570.6	570.6
62.5°	632.0	582.5	556.7	550.8	544.8	536.9	525.0	521.1	525.0	536.9	542.9
65°	542.9	521.1	513.1	509.2	505.2	499.3	491.4	487.4	489.4	495.3	503.2
67.5°	461.6	459.7	459.7	461.6	459.7	457.7	453.7	447.8	445.8	445.8	449.7
70°	412.1	412.1	418.0	418.0	416.1	416.1	410.1	404.2	400.2	396.3	398.2
72.5°	374.5	374.5	376.4	378.4	376.4	376.4	368.5	364.6	354.6	352.7	348.7
75°	342.8	338.8	338.8	336.8	334.8	336.8	328.9	319.0	315.0	313.0	309.1
77.5°	311.1	303.1	299.2	295.2	297.2	295.2	289.3	283.3	277.4	275.4	273.4
80°	275.4	263.5	257.6	247.7	253.6	255.6	251.6	245.7	243.7	241.7	239.7
82.5°	227.8	216.0	208.0	202.1	198.1	202.1	208.0	221.9	217.9	216.0	212.0
85°	178.3	158.5	148.6	150.6	140.7	142.7	160.5	168.4	168.4	172.4	168.4
87.5°	101.0	97.1	73.3	67.4	71.3	85.2	95.1	105.0	105.0	99.1	111.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7
2.5°	3201.7	3205.7	3207.7	3215.6	3219.5	3221.5	3223.5	3227.5	3229.5	3227.5	3237.4
5°	3217.6	3217.6	3213.6	3219.5	3221.5	3221.5	3217.6	3221.5	3221.5	3221.5	3231.4
7.5°	3259.2	3247.3	3241.3	3233.4	3227.5	3219.5	3209.6	3209.6	3207.7	3209.6	3215.6
10°	3302.8	3284.9	3263.1	3243.3	3225.5	3211.6	3193.8	3187.8	3185.9	3183.9	3199.7
12.5°	3336.4	3304.7	3271.1	3237.4	3201.7	3177.9	3148.2	3130.4	3128.4	3128.4	3148.2
15°	3312.7	3261.2	3195.8	3136.3	3104.6	3071.0	3037.3	3015.5	3013.5	3017.5	3029.3
17.5°	3193.8	3110.6	3053.1	2995.7	2954.1	2926.3	2904.5	2900.6	2908.5	2900.6	2916.4
20°	2991.7	2902.5	2862.9	2817.4	2801.5	2781.7	2750.0	2722.3	2722.3	2686.6	2696.5
22.5°	2730.2	2680.6	2629.1	2593.5	2581.6	2547.9	2514.2	2476.6	2472.6	2429.0	2423.1
25°	2456.8	2407.2	2365.6	2357.7	2322.0	2276.5	2244.8	2201.2	2191.3	2147.7	2141.7
27.5°	2177.4	2137.8	2096.2	2072.4	2052.6	2003.1	1975.3	1923.8	1904.0	1856.4	1850.5
30°	1911.9	1884.2	1834.6	1814.8	1777.2	1719.7	1660.3	1628.6	1612.7	1563.2	1547.4
32.5°	1662.3	1618.7	1581.0	1557.3	1509.7	1444.3	1390.8	1345.3	1315.6	1256.1	1240.3
35°	1424.5	1380.9	1363.1	1301.7	1260.1	1216.5	1143.2	1115.4	1062.0	1016.4	1000.5
37.5°	1214.5	1172.9	1149.1	1097.6	1056.0	1012.4	968.8	933.2	907.4	897.5	897.5
40°	1034.2	1012.4	982.7	945.1	917.3	885.6	861.8	850.0	848.0	851.9	861.8
42.5°	905.4	881.7	861.8	842.0	822.2	818.3	812.3	820.2	830.1	840.1	850.0
45°	808.4	788.5	776.7	768.7	766.7	772.7	784.6	796.5	814.3	826.2	834.1
47.5°	739.0	723.2	719.2	717.2	727.1	745.0	760.8	778.6	792.5	804.4	812.3
50°	679.6	665.7	663.7	661.7	675.6	691.5	705.3	729.1	739.0	746.9	752.9
52.5°	638.0	626.1	620.1	622.1	636.0	649.9	669.7	687.5	701.4	707.3	713.3
55°	604.3	600.3	586.5	592.4	606.3	624.1	643.9	663.7	677.6	687.5	697.4
57.5°	578.5	568.6	558.7	568.6	582.5	600.3	624.1	641.9	659.8	673.6	683.5
60°	550.8	542.9	534.9	544.8	558.7	576.5	594.4	618.2	639.9	653.8	663.7
62.5°	527.0	521.1	513.1	515.1	521.1	533.0	542.9	564.7	584.5	602.3	614.2
65°	493.3	491.4	479.5	481.4	485.4	497.3	505.2	525.0	544.8	560.7	570.6
67.5°	443.8	439.8	439.8	445.8	447.8	453.7	459.7	479.5	495.3	507.2	519.1
70°	394.3	392.3	392.3	396.3	394.3	400.2	408.1	426.0	445.8	457.7	469.6
72.5°	346.7	346.7	344.7	348.7	348.7	350.7	360.6	376.4	394.3	404.2	412.1
75°	305.1	303.1	303.1	303.1	305.1	305.1	315.0	328.9	346.7	352.7	364.6
77.5°	267.5	267.5	267.5	267.5	269.5	267.5	273.4	283.3	289.3	299.2	299.2
80°	235.8	233.8	235.8	237.8	237.8	235.8	235.8	237.8	239.7	239.7	239.7
82.5°	208.0	202.1	206.1	216.0	216.0	216.0	214.0	200.1	190.2	190.2	194.2
85°	166.4	166.4	168.4	182.3	184.3	176.3	184.3	164.4	144.6	138.7	142.7
87.5°	103.0	81.2	99.1	112.9	112.9	107.0	118.9	111.0	93.1	75.3	71.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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 CATALOG NUMBER: VTS-F12-LED-E1-SLL

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	0°
2.5°	3245.3	3247.3	3259.2	3265.1	3265.1	3273.0	3277.0	3288.9	3286.9	3286.9	3290.9	2.5°
5°	3241.3	3247.3	3259.2	3267.1	3271.1	3281.0	3288.9	3302.8	3300.8	3304.7	3306.7	5°
7.5°	3227.5	3243.3	3255.2	3271.1	3284.9	3292.9	3302.8	3314.6	3310.7	3312.7	3310.7	7.5°
10°	3215.6	3231.4	3255.2	3277.0	3296.8	3308.7	3314.6	3328.5	3326.5	3330.5	3330.5	10°
12.5°	3168.0	3195.8	3225.5	3259.2	3288.9	3320.6	3340.4	3370.1	3384.0	3401.8	3421.6	12.5°
15°	3047.2	3078.9	3126.4	3164.1	3221.5	3265.1	3322.6	3380.0	3431.5	3481.1	3538.5	15°
17.5°	2928.3	2942.2	2979.8	3031.3	3082.8	3148.2	3217.6	3320.6	3413.7	3514.8	3625.7	17.5°
20°	2708.4	2732.2	2757.9	2819.3	2880.8	2973.9	3059.1	3193.8	3330.5	3489.0	3659.4	20°
22.5°	2436.9	2460.7	2488.5	2557.8	2633.1	2728.2	2831.2	2981.8	3164.1	3370.1	3598.0	22.5°
25°	2143.7	2157.6	2179.4	2248.7	2294.3	2419.1	2543.9	2700.5	2898.6	3164.1	3429.6	25°
27.5°	1820.8	1846.5	1864.4	1896.1	2001.1	2108.1	2238.8	2407.2	2647.0	2918.4	3239.4	27.5°
30°	1511.7	1533.5	1523.6	1591.0	1660.3	1773.2	1913.9	2100.1	2330.0	2652.9	3023.4	30°
32.5°	1208.6	1224.4	1218.5	1266.0	1335.4	1448.3	1581.0	1783.1	2026.8	2371.6	2773.8	32.5°
35°	996.6	1000.5	1022.3	1044.1	1103.6	1194.7	1307.6	1484.0	1733.6	2050.6	2476.6	35°
37.5°	897.5	905.4	919.3	949.0	992.6	1058.0	1151.1	1287.8	1501.8	1781.2	2161.6	37.5°
40°	867.8	873.7	881.7	901.5	943.1	1000.5	1083.7	1198.7	1355.2	1591.0	1900.0	40°
42.5°	853.9	853.9	853.9	865.8	897.5	958.9	1054.0	1167.0	1303.7	1482.0	1731.6	42.5°
45°	834.1	834.1	832.1	838.1	859.9	921.3	1024.3	1151.1	1297.7	1468.1	1684.1	45°
47.5°	812.3	810.3	804.4	804.4	818.3	879.7	986.7	1123.4	1283.9	1480.0	1711.8	47.5°
50°	752.9	752.9	752.9	758.8	770.7	826.2	941.1	1085.7	1270.0	1487.9	1755.4	50°
52.5°	719.2	721.2	727.1	727.1	739.0	796.5	917.3	1077.8	1277.9	1517.6	1810.9	52.5°
55°	703.3	709.3	715.2	715.2	725.1	784.6	909.4	1083.7	1307.6	1579.1	1906.0	55°
57.5°	689.5	695.4	699.4	699.4	707.3	758.8	887.6	1073.8	1325.5	1638.5	2022.9	57.5°
60°	663.7	667.7	669.7	669.7	671.6	715.2	838.1	1026.3	1285.8	1634.5	2086.3	60°
62.5°	616.2	624.1	626.1	628.1	628.1	669.7	774.7	949.0	1200.6	1575.1	2068.4	62.5°
65°	580.5	584.5	590.4	594.4	602.3	630.0	713.3	855.9	1089.7	1456.2	1969.4	65°
67.5°	525.0	531.0	536.9	544.8	552.8	570.6	636.0	750.9	939.1	1254.1	1747.5	67.5°
70°	475.5	477.5	483.4	493.3	495.3	505.2	552.8	632.0	768.7	1006.5	1406.7	70°
72.5°	414.1	418.0	426.0	437.9	437.9	445.8	473.5	515.1	602.3	768.7	1038.2	72.5°
75°	360.6	364.6	370.5	370.5	360.6	362.6	382.4	412.1	477.5	578.5	756.8	75°
77.5°	299.2	307.1	313.0	301.2	297.2	303.1	313.0	334.8	382.4	459.7	568.6	77.5°
80°	247.7	251.6	253.6	255.6	251.6	257.6	265.5	279.4	311.1	370.5	449.7	80°
82.5°	198.1	202.1	208.0	216.0	216.0	237.8	239.7	239.7	257.6	295.2	352.7	82.5°
85°	146.6	154.5	162.5	172.4	174.4	186.2	180.3	178.3	184.3	219.9	243.7	85°
87.5°	75.3	81.2	85.2	93.1	83.2	87.2	87.2	81.2	71.3	89.2	99.1	87.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°



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NUMBER: VTS-F12-LED-E1-SLL

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
3310.7	3310.7	3310.7	3310.7	3310.7	3310.7	3310.7
3294.8	3290.9	3294.8	3294.8	3300.8	3296.8	3506.8
3310.7	3306.7	3310.7	3314.6	3320.6	3320.6	3552.4
3312.7	3312.7	3308.7	3318.6	3326.5	3334.5	3596.0
3336.4	3336.4	3340.4	3342.4	3360.2	3380.0	3667.3
3433.5	3443.4	3461.3	3467.2	3498.9	3520.7	3849.6
3582.1	3637.6	3673.3	3685.1	3712.9	3754.5	4156.7
3732.7	3825.8	3922.9	3982.3	4018.0	4067.5	4533.1
3845.6	4020.0	4186.4	4335.0	4420.2	4517.3	5060.1
3855.5	4132.9	4414.2	4689.6	4917.5	5097.8	5773.4
3760.4	4125.0	4513.3	4935.3	5327.6	5652.5	6593.6
3639.6	4087.3	4582.7	5121.6	5636.7	6116.1	7197.9
3487.0	4023.9	4594.5	5200.8	5805.1	6381.6	7542.7
3255.2	3835.7	4451.9	5121.6	5822.9	6524.3	7764.6
2958.0	3550.4	4182.4	4945.2	5739.7	6581.7	7950.8
2654.9	3239.4	3918.9	4709.5	5607.0	6571.8	8026.1
2333.9	2914.4	3609.9	4457.8	5426.7	6480.7	8012.2
2116.0	2645.0	3326.5	4202.3	5226.6	6359.8	7919.1
1989.2	2452.8	3102.7	3968.5	5044.3	6215.2	7802.2
1987.2	2395.3	2983.8	3802.0	4860.0	6054.7	7643.7
2056.5	2431.0	2969.9	3730.7	4759.0	5937.8	7471.3
2137.8	2530.1	3043.2	3756.5	4757.0	5886.3	7350.5
2266.6	2698.5	3203.7	3867.4	4808.5	5878.4	7201.9
2431.0	2926.3	3493.0	4140.8	5008.6	6034.9	7211.8
2599.4	3193.8	3871.4	4608.4	5402.9	6399.5	7524.8
2660.8	3399.8	4255.7	5157.2	5993.3	6946.3	8170.7
2607.3	3447.4	4489.5	5583.2	6567.9	7586.2	8941.4
2409.2	3255.2	4394.4	5704.0	6898.7	8040.0	9712.1
1983.2	2777.7	3962.5	5432.6	6873.0	8133.1	9989.5
1454.2	2153.6	3221.5	4616.3	6110.2	7550.6	9573.4
1050.1	1523.6	2326.0	3477.1	4830.3	6080.5	8030.0
752.9	1056.0	1509.7	2284.4	3290.9	4234.0	5723.9
540.9	717.2	941.1	1371.0	2005.0	2599.4	3596.0
398.2	491.4	618.2	851.9	1180.8	1513.7	2165.5
271.4	289.3	372.5	503.2	774.7	1113.5	1470.1
103.0	116.9	136.7	206.1	346.7	398.2	281.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)