

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: STREETWORKS

Report Number: P237536

Luminaire Tested: **CST-10-3-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-26)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-10-3-D-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 4000K LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29276 lumens
Efficiency: N/A
Efficacy: 138.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 212
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: 28.75 FT

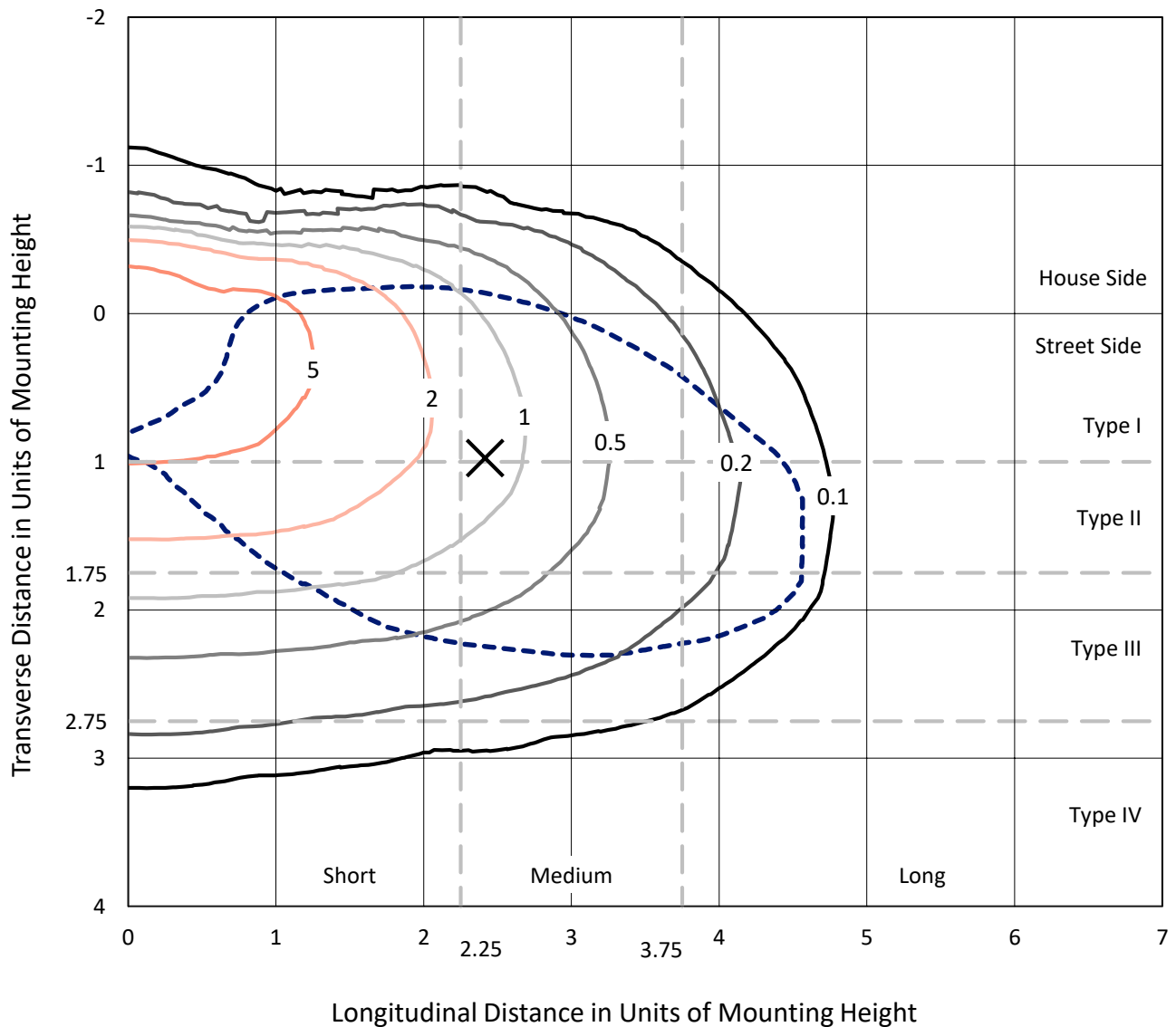


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

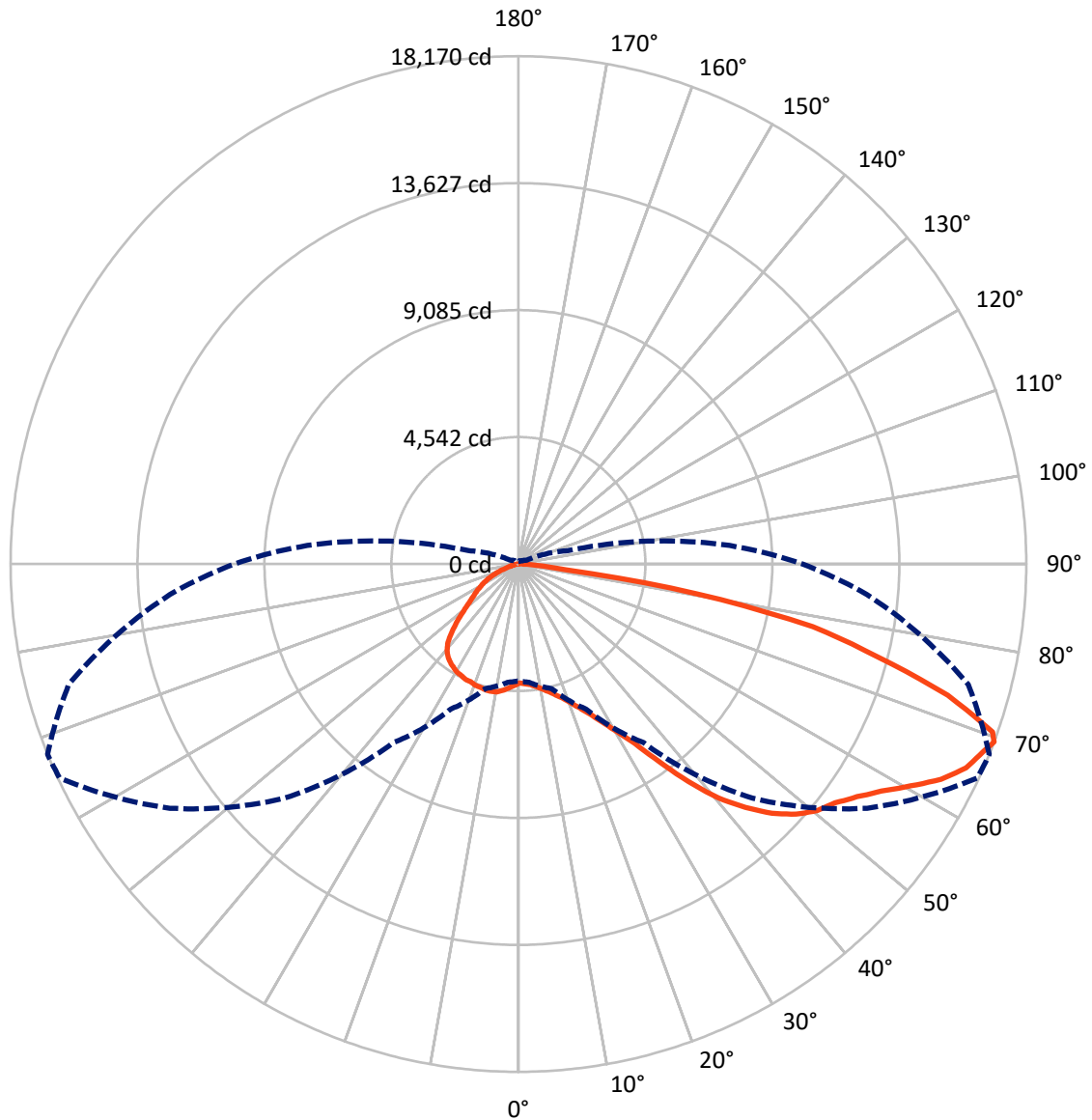


Based on 25 foot mounting height. Maximum calculated value = 8.3 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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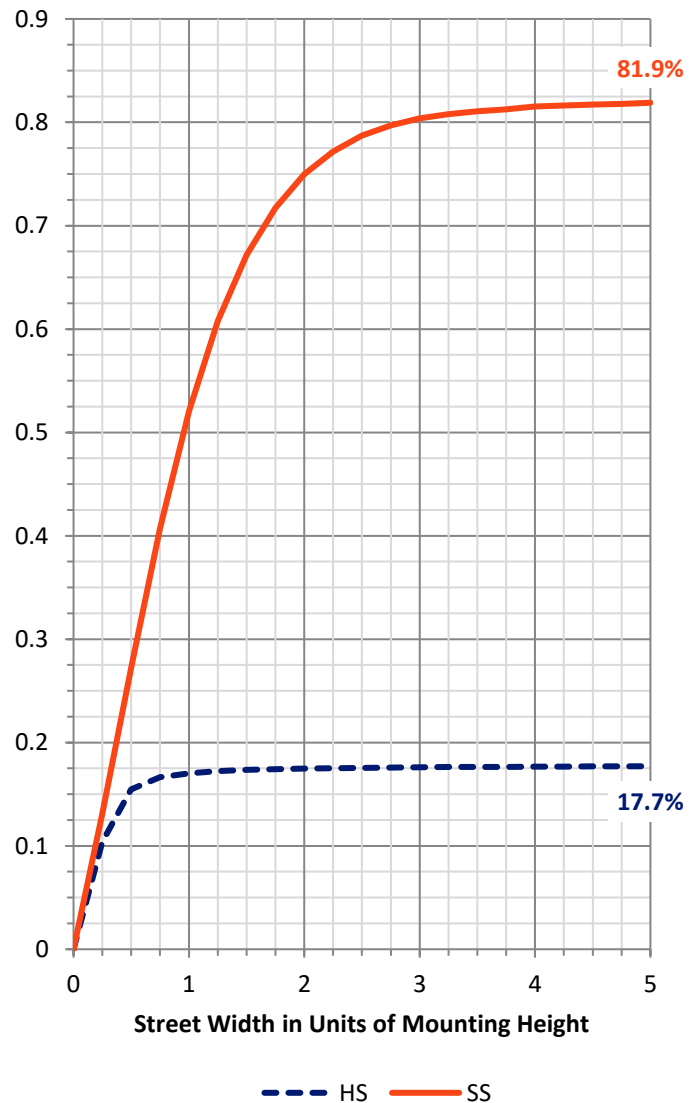
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5254.0	0.0	5254.0
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	24022.0	0.0	24022.0
	% Fixture	82.1	0.0	82.1
Total	Lumens	29276.0	0.0	29276.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	427.7	1.5
10°-20°	1342.0	4.6
20°-30°	2294.0	7.8
30°-40°	3534.7	12.1
40°-50°	5072.5	17.3
50°-60°	6105.0	20.9
60°-70°	6406.7	21.9
70°-80°	3711.6	12.7
80°-90°	381.9	1.3
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°	29276.0	100.0
0°-180°	29276.0	100.0

Coefficient of Utilization



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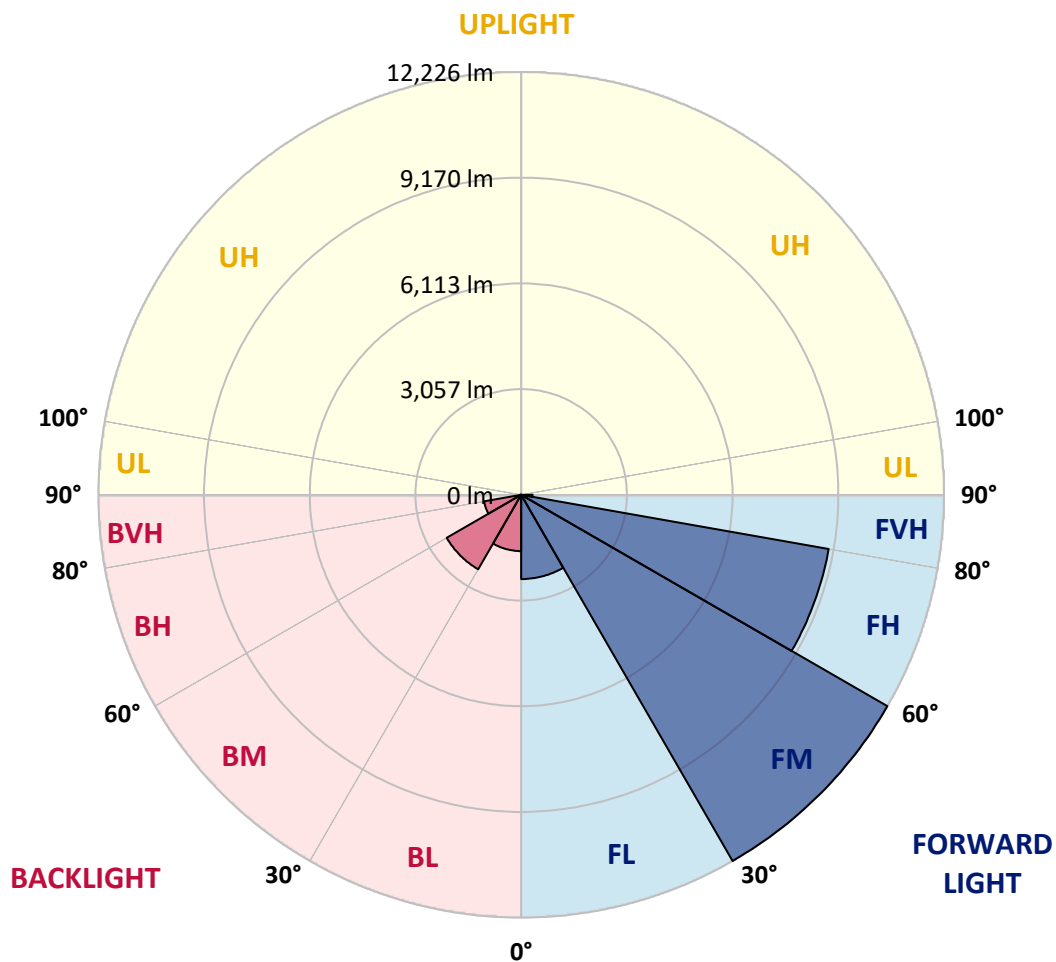
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2435.6	8.3			
FM	(30°-60°)	12226.1	41.8			
FH	(60°-80°)	9028.4	30.8			G4/12000
FVH	(80°-90°)	331.9	1.1			G3/500
BL	(0°-30°)	1628.0	5.6	B3/2500		
BM	(30°-60°)	2486.2	8.5	B2/2500		
BH	(60°-80°)	1089.8	3.7	B3/2500		G3/2500
BVH	(80°-90°)	50.0	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3
2.5°	4306.0	4271.5	4275.6	4303.0	4221.8	4256.3	4235.0	4279.6	4286.7	4265.4	4284.7
5°	4391.2	4361.8	4360.8	4388.2	4297.9	4324.3	4290.8	4321.2	4330.4	4308.1	4341.5
7.5°	4556.6	4525.1	4519.0	4546.4	4431.8	4439.9	4394.3	4409.5	4417.6	4387.2	4420.6
10°	4793.9	4759.4	4737.1	4752.3	4623.5	4603.2	4525.1	4523.1	4535.3	4493.7	4547.4
12.5°	5059.7	5019.1	4986.7	4989.7	4842.6	4808.1	4704.7	4668.2	4676.3	4620.5	4685.4
15°	5348.8	5290.0	5259.5	5260.5	5095.2	5037.4	4904.5	4844.7	4839.6	4785.8	4823.4
17.5°	5696.7	5649.1	5610.5	5590.2	5414.7	5300.1	5141.9	5063.8	5035.4	4999.9	4980.6
20°	6105.5	6045.7	6005.1	5998.0	5783.0	5630.8	5420.8	5317.4	5283.9	5254.5	5168.2
22.5°	6561.0	6500.1	6444.3	6435.2	6207.0	6023.4	5741.4	5613.6	5584.1	5550.7	5378.2
25°	6980.9	6973.8	6912.0	6901.8	6681.7	6443.3	6112.6	5949.3	5949.3	5909.7	5645.0
27.5°	7449.6	7459.7	7403.9	7391.7	7184.8	6921.1	6527.5	6371.3	6403.7	6332.7	5980.8
30°	7943.6	7922.3	7907.1	7920.2	7728.5	7449.6	7039.8	6907.9	6958.6	6877.5	6431.1
32.5°	8385.8	8369.6	8379.8	8430.5	8292.5	8034.9	7682.9	7600.7	7649.4	7700.1	7238.6
35°	8735.8	8701.3	8829.1	8940.7	8901.1	8656.7	8373.7	8547.1	8681.0	8912.3	8428.4
37.5°	9044.2	9018.8	9174.0	9402.2	9451.9	9316.0	9228.8	9712.6	9865.8	10177.2	9472.2
40°	9198.4	9193.3	9384.0	9681.2	9883.1	9971.3	10124.5	10783.8	11007.0	11092.2	10266.5
42.5°	9148.6	9164.9	9501.6	9960.1	10286.8	10665.1	10973.5	11698.8	11903.7	11833.7	10962.3
45°	9009.7	9017.8	9359.6	10074.8	10636.7	11378.2	11790.1	12546.8	12728.4	12481.9	11516.2
47.5°	8816.9	8820.0	9181.1	9995.7	10922.8	12023.4	12494.1	13224.4	13371.5	13023.6	11914.8
50°	8556.3	8561.3	8992.4	9896.2	11169.3	12551.9	13044.9	13749.9	13863.5	13408.0	12259.7
52.5°	8226.6	8271.2	8742.9	9737.0	11323.5	12927.2	13461.8	14135.3	14191.1	13867.5	12565.1
55°	7846.2	7892.9	8425.4	9520.9	11383.3	13140.2	13753.9	14610.0	14699.3	14380.8	12813.6
57.5°	7395.8	7459.7	8020.7	9169.9	11243.3	13229.5	14051.1	15196.4	15317.1	14917.4	13069.2
60°	6873.4	6952.5	7542.9	8731.7	10919.7	13323.8	14607.0	15982.5	16122.5	15494.6	13292.4
62.5°	6327.7	6378.4	6912.0	8134.3	10401.4	13396.8	15205.5	16951.2	16963.4	16000.7	13416.1
65°	5597.3	5651.1	6128.9	7379.6	9623.4	13164.6	15507.8	17630.9	17594.3	16397.4	13374.5
67.5°	4761.5	4812.2	5202.7	6441.3	8555.2	12513.3	15404.3	17901.7	17926.0	16685.5	12975.9
69°	4181.3	4248.2	4616.4	5728.2	7800.5	11846.9	15230.8	18112.7	18169.5	16659.1	12514.3
70°	3685.2	3771.4	4121.4	5098.2	7161.5	11241.3	14896.1	17993.0	17997.0	16392.3	12089.3
72.5°	2407.1	2459.9	2520.7	3307.9	5152.0	8908.2	13181.8	15957.1	16062.6	14627.3	10569.8
75°	1190.9	1237.5	1464.8	1749.8	2649.5	5967.6	10451.1	13073.3	13273.1	12422.0	8659.7
77.5°	657.3	666.4	746.6	1146.2	1373.5	2698.2	7143.2	10421.7	10771.6	10123.5	6219.1
80°	409.8	407.8	426.0	533.6	769.9	1279.1	3016.8	5848.9	6477.8	5285.9	2457.8
82.5°	319.5	313.4	314.5	344.9	325.6	602.5	1255.8	1703.1	1718.4	1525.6	956.6
85°	163.3	184.6	219.1	229.2	192.7	327.6	578.2	672.5	688.8	603.6	498.1
87.5°	54.8	55.8	58.8	57.8	51.7	112.6	214.0	249.5	222.1	125.8	170.4
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3	4258.3
2.5°	4314.1	4305.0	4323.3	4364.9	4330.4	4361.8	4330.4	4435.9	4423.7	4416.6	4436.9
5°	4374.0	4373.0	4402.4	4469.3	4466.3	4522.1	4491.7	4596.1	4580.9	4578.9	4597.1
7.5°	4455.1	4474.4	4505.9	4574.8	4575.8	4621.5	4587.0	4669.2	4635.7	4627.6	4652.9
10°	4578.9	4584.0	4608.3	4656.0	4589.0	4609.3	4552.5	4617.4	4570.8	4565.7	4603.2
12.5°	4697.6	4704.7	4668.2	4652.9	4566.7	4540.3	4440.9	4475.4	4421.7	4416.6	4434.8
15°	4824.4	4776.7	4689.5	4639.8	4490.6	4395.3	4283.7	4215.7	4123.4	4080.8	4097.1
17.5°	4956.2	4863.9	4700.6	4579.9	4380.1	4241.1	4019.0	3903.3	3766.4	3696.4	3683.2
20°	5100.3	4970.4	4728.0	4549.5	4268.5	3994.6	3723.8	3459.0	3302.8	3230.8	3211.5
22.5°	5262.6	5104.3	4766.5	4448.0	4094.0	3761.3	3303.8	2970.1	2742.9	2672.9	2653.6
25°	5465.5	5254.5	4819.3	4422.7	3926.6	3379.9	2810.8	2432.5	2167.7	2061.2	2038.9
27.5°	5711.9	5461.4	4905.5	4302.0	3632.5	2954.9	2320.9	1885.7	1610.8	1485.0	1457.7
30°	6071.0	5726.1	4963.3	4231.0	3370.8	2513.6	1803.6	1317.7	1057.0	964.7	940.3
32.5°	6779.1	6180.6	5081.0	4067.6	2984.3	2000.3	1241.6	808.5	625.9	573.1	552.8
35°	7831.0	7036.7	5250.4	3873.9	2550.1	1423.2	737.5	468.6	376.3	357.1	351.0
37.5°	8789.6	7881.7	5578.0	3575.7	1980.1	875.4	427.1	300.3	276.9	280.0	280.0
40°	9512.8	8509.6	5960.5	3182.1	1343.0	491.0	293.2	249.5	254.6	255.6	254.6
42.5°	10190.4	9084.7	6145.1	2747.9	778.0	325.6	254.6	232.3	236.3	233.3	231.3
45°	10723.0	9496.6	6199.9	2163.7	426.0	291.1	239.4	216.1	214.0	216.1	218.1
47.5°	11068.9	9748.1	6075.1	1656.5	321.6	270.8	230.3	204.9	199.8	214.0	213.0
50°	11325.5	9920.6	5591.2	1259.9	313.4	253.6	219.1	191.7	193.7	211.0	209.0
52.5°	11512.1	9965.2	5060.7	1010.3	299.2	241.4	209.0	185.6	183.6	196.8	197.8
55°	11660.2	9845.5	4730.0	795.3	287.1	229.2	200.8	179.5	169.4	173.5	172.4
57.5°	11752.5	9708.6	4352.7	663.4	275.9	216.1	189.7	163.3	148.1	149.1	148.1
60°	11732.3	9617.3	3919.5	543.7	261.7	203.9	174.5	146.1	130.9	126.8	126.8
62.5°	11691.7	9429.6	3472.2	473.7	249.5	199.8	156.2	132.9	121.7	117.7	117.7
65°	11415.8	8982.3	2873.7	405.7	237.4	188.7	146.1	127.8	114.6	110.6	110.6
67.5°	10731.1	8242.8	2225.5	353.0	228.2	170.4	143.0	124.8	110.6	105.5	105.5
69°	10152.9	7585.5	1827.9	324.6	219.1	162.3	143.0	125.8	108.5	102.5	102.5
70°	9701.5	7069.2	1512.4	307.4	210.0	157.2	143.0	126.8	107.5	100.4	99.4
72.5°	8325.0	5519.2	839.9	260.7	174.5	143.0	140.0	127.8	102.5	92.3	91.3
75°	6387.5	3880.0	500.1	220.1	147.1	130.9	132.9	122.7	94.3	83.2	83.2
77.5°	3991.6	1782.3	372.3	172.4	119.7	113.6	115.6	108.5	85.2	76.1	76.1
80°	1363.3	804.4	281.0	132.9	86.2	88.3	95.4	91.3	76.1	69.0	68.0
82.5°	746.6	523.4	198.8	92.3	59.8	73.0	73.0	74.0	65.9	60.9	59.8
85°	405.7	272.9	122.7	55.8	42.6	53.8	51.7	55.8	53.8	49.7	48.7
87.5°	141.0	93.3	40.6	20.3	17.2	18.3	21.3	28.4	27.4	28.4	29.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)