

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: P237547

Luminaire Tested: **CST-8-6-D-U-T3-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237547
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-8-6-D-U-T3-7050-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 5000K LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 58588 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B4 - U0 - G5

Input Watts (W): 477
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

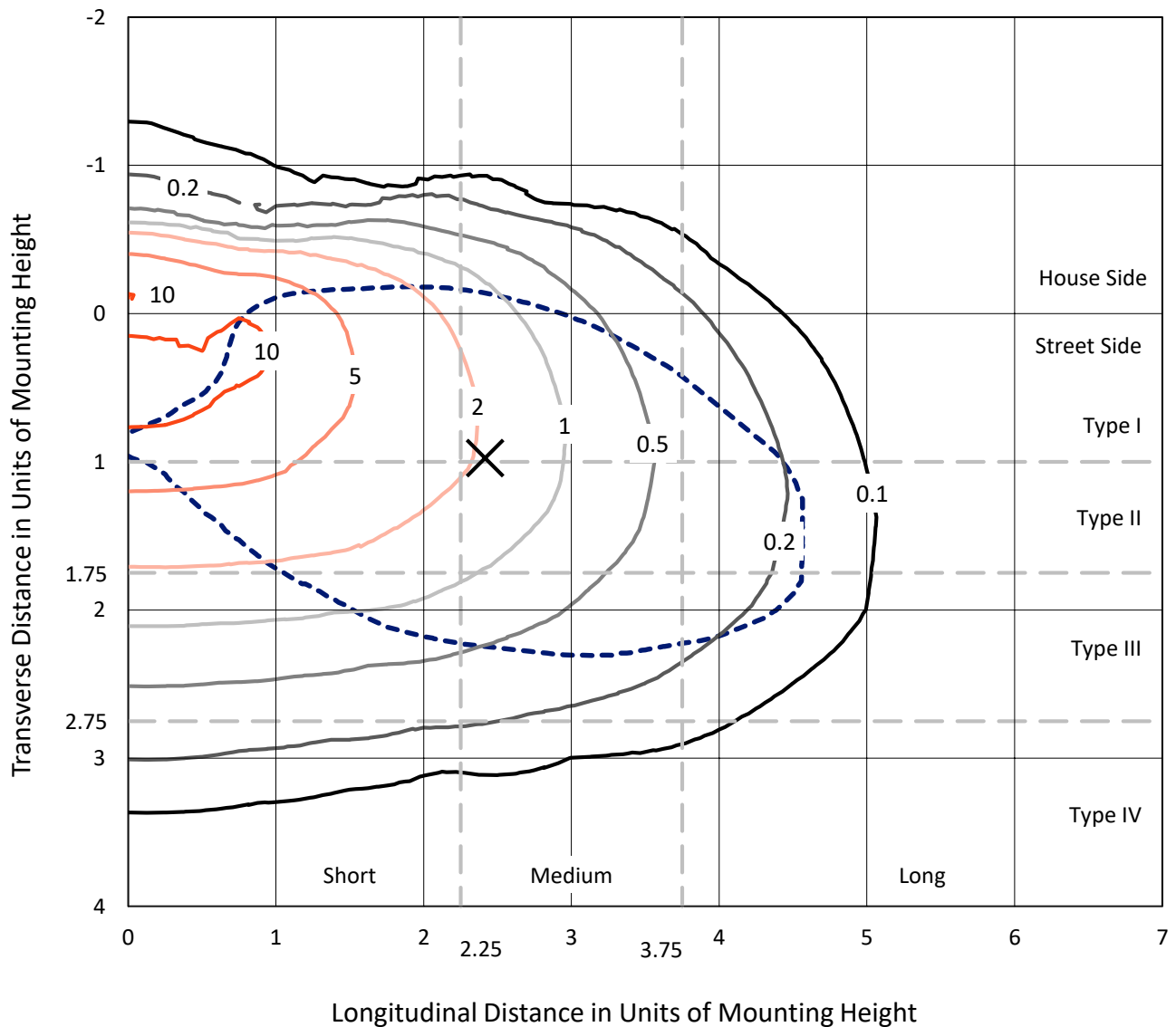


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

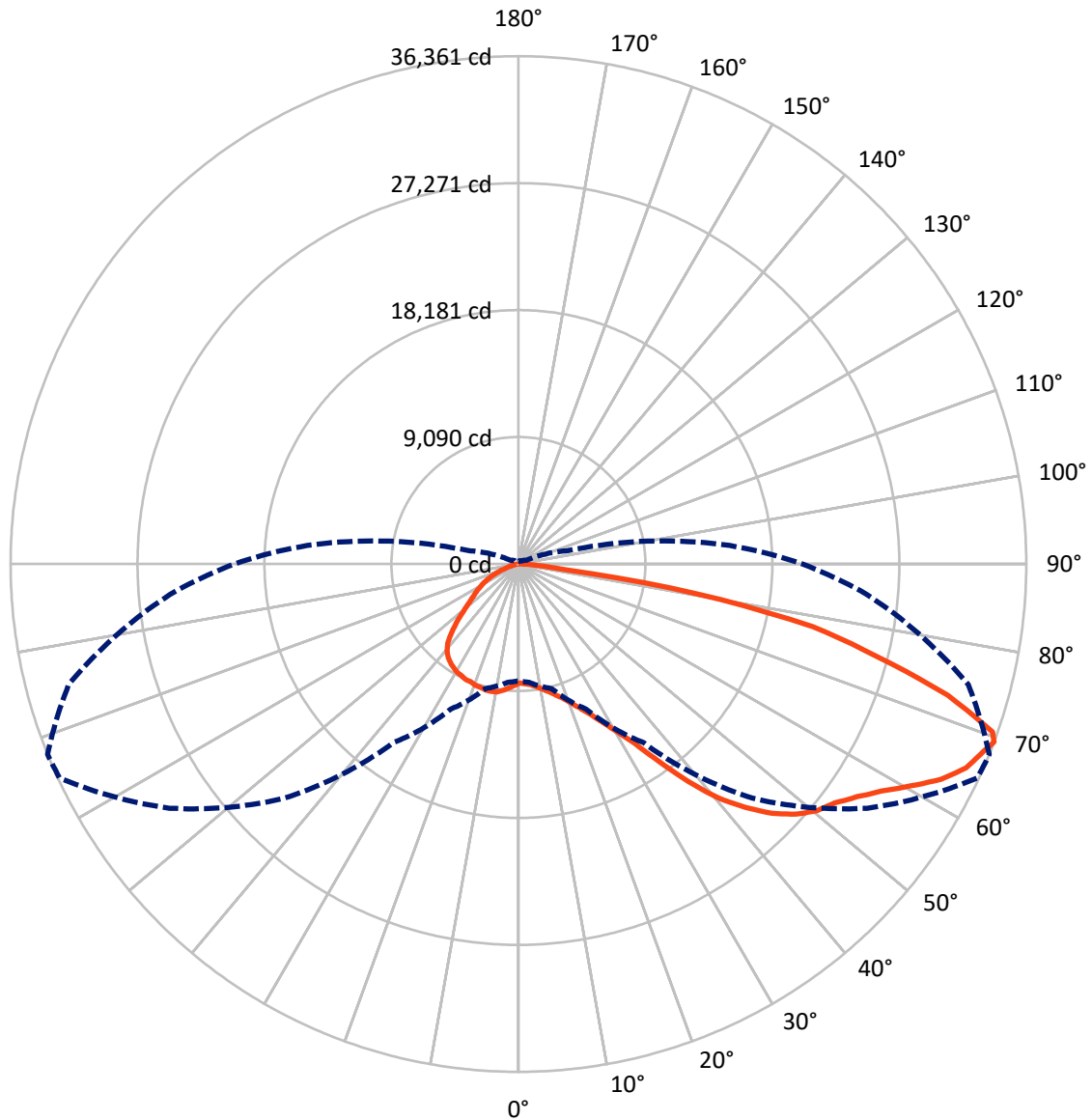


Based on 30 foot mounting height. Maximum calculated value = 11.6 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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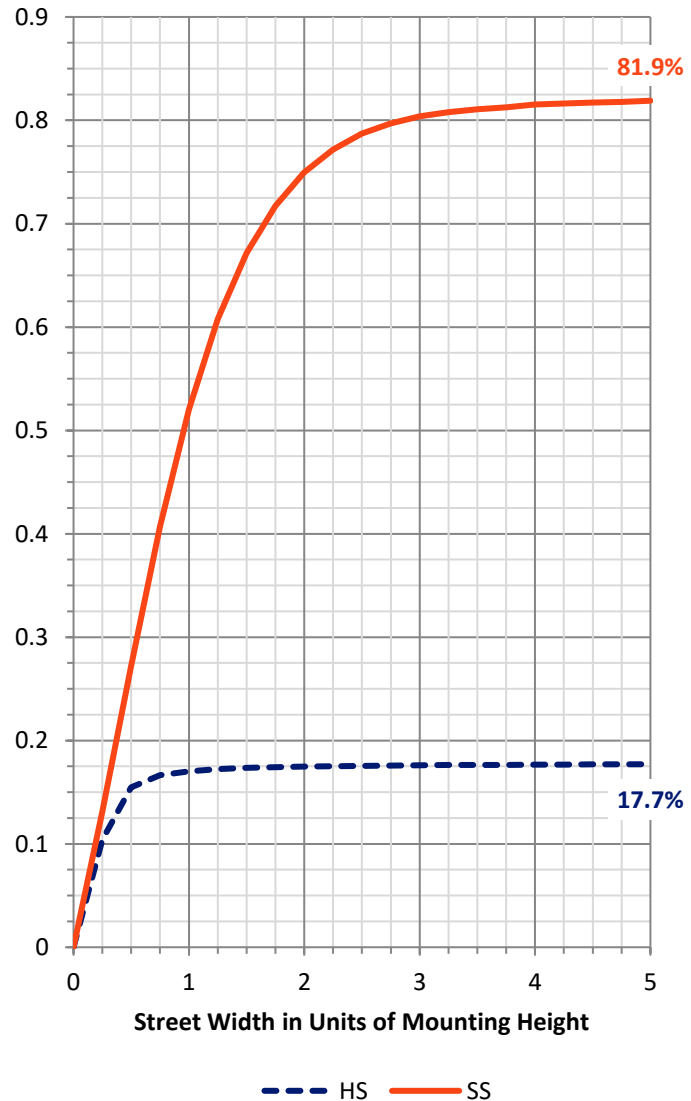
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10514.4	0.0	10514.4
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	48073.6	0.0	48073.6
	% Fixture	82.1	0.0	82.1
Total	Lumens	58588.0	0.0	58588.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	855.8	1.5
10°-20°	2685.6	4.6
20°-30°	4590.8	7.8
30°-40°	7073.8	12.1
40°-50°	10151.3	17.3
50°-60°	12217.5	20.9
60°-70°	12821.2	21.9
70°-80°	7427.7	12.7
80°-90°	764.3	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°	58588.0	100.0
0°-180°	58588.0	100.0

Coefficient of Utilization



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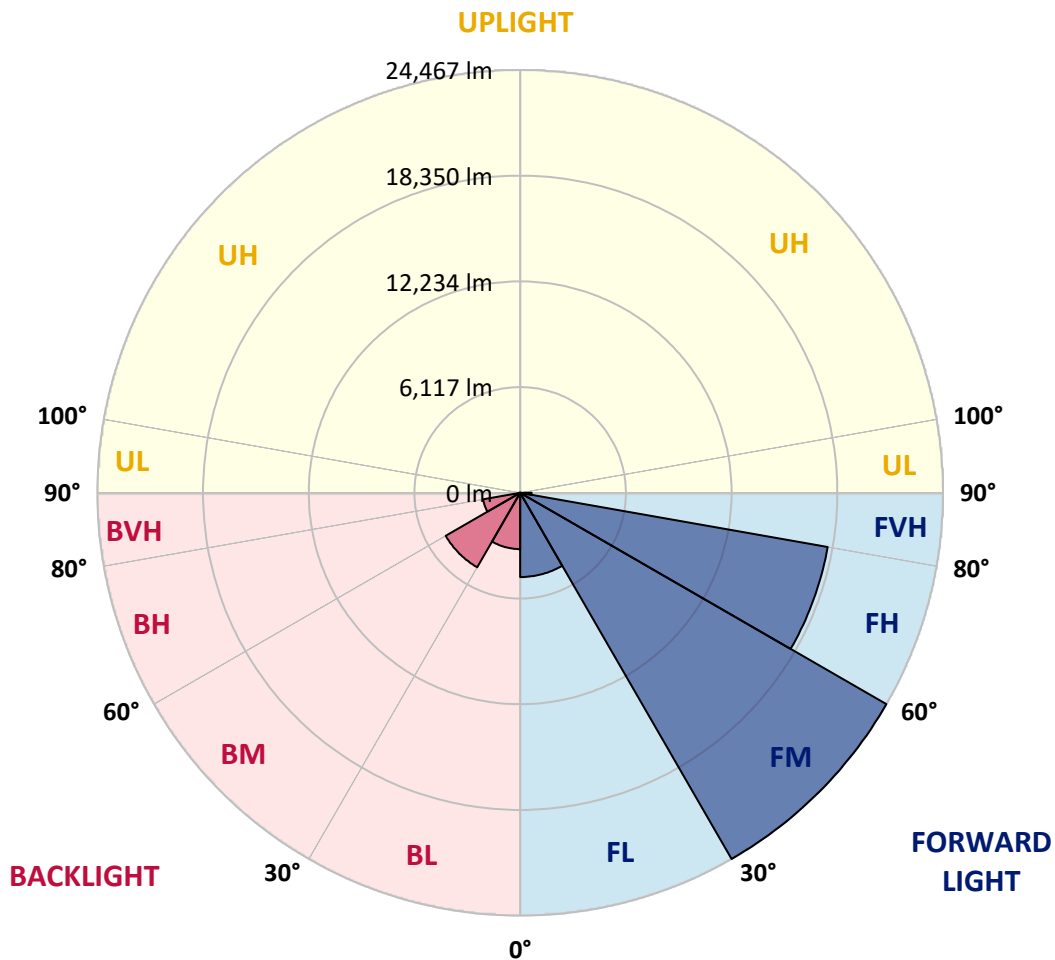
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4874.3	8.3			
FM (30°-60°)	24467.2	41.8			
FH (60°-80°)	18067.9	30.8			G5
FVH (80°-90°)	664.2	1.1			G4/750
BL (0°-30°)	3257.9	5.6	B4/5000		
BM (30°-60°)	4975.4	8.5	B3/5000		
BH (60°-80°)	2181.0	3.7	B3/2500		G3/2500
BVH (80°-90°)	100.0	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9
2.5°	8617.3	8548.3	8556.4	8611.2	8448.8	8517.9	8475.2	8564.6	8578.8	8536.1	8574.7
5°	8787.9	8729.0	8727.0	8781.8	8601.1	8653.9	8586.9	8647.8	8666.1	8621.4	8688.4
7.5°	9118.7	9055.8	9043.6	9098.4	8869.1	8885.3	8793.9	8824.4	8840.6	8779.7	8846.7
10°	9593.8	9524.7	9480.1	9510.5	9252.7	9212.1	9055.8	9051.8	9076.1	8992.9	9100.5
12.5°	10125.6	10044.4	9979.5	9985.6	9691.2	9622.2	9415.1	9342.0	9358.3	9246.6	9376.6
15°	10704.2	10586.4	10525.5	10527.6	10196.7	10081.0	9815.0	9695.3	9685.1	9577.5	9652.6
17.5°	11400.5	11305.1	11227.9	11187.3	10836.1	10606.7	10290.1	10133.7	10076.9	10005.9	9967.3
20°	12218.6	12098.8	12017.6	12003.4	11573.0	11268.5	10848.3	10641.2	10574.3	10515.4	10342.8
22.5°	13130.0	13008.2	12896.6	12878.3	12421.6	12054.1	11489.8	11234.0	11175.1	11108.1	10763.0
25°	13970.4	13956.2	13832.4	13812.1	13371.6	12894.5	12232.8	11905.9	11905.9	11826.8	11296.9
27.5°	14908.3	14928.6	14816.9	14792.6	14378.5	13850.7	13063.0	12750.4	12815.4	12673.3	11968.9
30°	15896.9	15854.3	15823.8	15850.2	15466.5	14908.3	14088.2	13824.3	13925.8	13763.4	12870.2
32.5°	16782.0	16749.5	16769.8	16871.3	16595.2	16079.6	15375.2	15210.8	15308.2	15409.7	14486.1
35°	17482.3	17413.3	17669.1	17892.4	17813.2	17324.0	16757.6	17104.8	17372.7	17835.6	16867.2
37.5°	18099.5	18048.7	18359.3	18816.0	18915.5	18643.5	18468.9	19437.2	19743.8	20367.0	18956.1
40°	18408.0	18397.9	18779.5	19374.3	19778.3	19954.9	20261.4	21580.9	22027.5	22198.0	20545.6
42.5°	18308.5	18341.0	19015.0	19932.5	20586.2	21343.4	21960.5	23412.0	23822.0	23681.9	21938.2
45°	18030.4	18046.7	18730.8	20161.9	21286.6	22770.5	23594.7	25109.0	25472.4	24979.1	23046.6
47.5°	17644.7	17650.8	18373.5	20003.6	21859.0	24061.6	25003.5	26465.1	26759.4	26063.1	23844.3
50°	17123.0	17133.2	17995.9	19804.7	22352.3	25119.2	26105.8	27516.6	27744.0	26832.5	24534.5
52.5°	16463.3	16552.6	17496.5	19485.9	22660.9	25870.3	26940.1	28288.0	28399.7	27752.1	25145.6
55°	15702.0	15795.4	16861.2	19053.6	22780.6	26296.6	27524.7	29238.0	29416.7	28779.3	25642.9
57.5°	14800.7	14928.6	16051.2	18351.2	22500.5	26475.2	28119.5	30411.4	30653.0	29853.1	26154.5
60°	13755.3	13913.6	15095.1	17474.2	21852.9	26664.0	29232.0	31984.6	32264.8	31008.2	26601.1
62.5°	12663.1	12764.6	13832.4	16278.5	20815.6	26810.2	30429.7	33923.3	33947.6	32021.2	26848.7
65°	11201.5	11309.1	12265.2	14768.2	19258.6	26345.3	31034.6	35283.4	35210.3	32814.9	26765.5
67.5°	9528.8	9630.3	10411.9	12890.5	17121.0	25042.0	30827.5	35825.4	35874.1	33391.4	25967.7
69°	8367.6	8501.6	9238.5	11463.4	15610.7	23708.3	30480.4	36247.6	36361.3	33338.6	25044.1
70°	7375.0	7547.5	8247.9	10202.8	14331.8	22496.4	29810.5	36008.1	36016.2	32804.8	24193.5
72.5°	4817.2	4922.7	5044.5	6619.8	10310.4	17827.4	26379.8	31933.9	32145.0	29272.6	21152.6
75°	2383.2	2476.6	2931.3	3501.7	5302.4	11942.5	20915.1	26162.6	26562.5	24859.3	17330.1
77.5°	1315.4	1333.7	1494.1	2293.9	2748.6	5399.8	14295.2	20856.2	21556.5	20259.4	12445.9
80°	820.1	816.1	852.6	1067.8	1540.8	2559.8	6037.2	11705.0	12963.6	10578.3	4918.7
82.5°	639.4	627.3	629.3	690.2	651.6	1205.8	2513.1	3408.4	3438.8	3053.1	1914.3
85°	326.8	369.5	438.5	458.8	385.7	655.7	1157.1	1345.9	1378.4	1207.8	996.7
87.5°	109.6	111.6	117.7	115.7	103.5	225.3	428.3	499.4	444.6	251.7	341.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9	8521.9
2.5°	8633.6	8615.3	8651.8	8735.1	8666.1	8729.0	8666.1	8877.2	8852.8	8838.6	8879.2
5°	8753.3	8751.3	8810.2	8944.2	8938.1	9049.7	8988.8	9197.9	9167.5	9163.4	9199.9
7.5°	8915.7	8954.3	9017.2	9155.3	9157.3	9248.7	9179.6	9344.1	9277.1	9260.8	9311.6
10°	9163.4	9173.6	9222.3	9317.7	9183.7	9224.3	9110.6	9240.5	9147.2	9137.0	9212.1
12.5°	9400.9	9415.1	9342.0	9311.6	9139.0	9086.3	8887.3	8956.3	8848.8	8838.6	8875.1
15°	9654.7	9559.3	9384.7	9285.2	8986.8	8796.0	8572.7	8436.7	8251.9	8166.7	8199.2
17.5°	9918.6	9733.8	9407.0	9165.4	8765.5	8487.4	8042.8	7811.4	7537.4	7397.3	7370.9
20°	10206.8	9947.0	9461.8	9104.5	8542.2	7994.1	7452.1	6922.3	6609.7	6465.5	6427.0
22.5°	10531.6	10214.9	9539.0	8901.5	8193.1	7527.2	6611.7	5943.8	5489.1	5349.0	5310.5
25°	10937.6	10515.4	9644.5	8850.8	7858.1	6764.0	5625.1	4867.9	4338.1	4125.0	4080.3
27.5°	11430.9	10929.5	9817.1	8609.2	7269.4	5913.4	4644.6	3773.8	3223.6	2971.9	2917.1
30°	12149.5	11459.3	9932.8	8467.1	6745.7	5030.3	3609.3	2637.0	2115.3	1930.5	1881.8
32.5°	13566.5	12368.8	10168.3	8140.3	5972.3	4003.2	2484.7	1617.9	1252.5	1146.9	1106.3
35°	15671.6	14082.1	10507.3	7752.6	5103.4	2848.1	1475.8	937.9	753.1	714.6	702.4
37.5°	17589.9	15773.1	11163.0	7155.7	3962.6	1751.9	854.6	600.9	554.2	560.3	560.3
40°	19037.3	17029.6	11928.3	6368.1	2687.7	982.5	586.7	499.4	509.5	511.6	509.5
42.5°	20393.4	18180.7	12297.7	5499.3	1557.0	651.6	509.5	464.9	473.0	466.9	462.8
45°	21459.1	19004.8	12407.3	4330.0	852.6	582.6	479.1	432.4	428.3	432.4	436.4
47.5°	22151.3	19508.3	12157.7	3315.0	643.5	542.0	460.8	410.1	399.9	428.3	426.3
50°	22664.9	19853.4	11189.3	2521.3	627.3	507.5	438.5	383.7	387.7	422.2	418.2
52.5°	23038.4	19942.7	10127.7	2021.9	598.8	483.1	418.2	371.5	367.4	393.8	395.8
55°	23334.8	19703.2	9465.9	1591.5	574.5	458.8	401.9	359.3	339.0	347.1	345.1
57.5°	23519.5	19429.1	8710.7	1327.6	552.2	432.4	379.6	326.8	296.4	298.4	296.4
60°	23478.9	19246.4	7843.9	1088.1	523.7	408.0	349.2	292.3	261.9	253.7	253.7
62.5°	23397.7	18870.9	6948.7	948.0	499.4	399.9	312.6	265.9	243.6	235.5	235.5
65°	22845.6	17975.6	5751.0	812.0	475.0	377.6	292.3	255.8	229.4	221.3	221.3
67.5°	21475.3	16495.8	4453.8	706.4	456.7	341.0	286.2	249.7	221.3	211.1	211.1
69°	20318.2	15180.3	3658.1	649.6	438.5	324.8	286.2	251.7	217.2	205.0	205.0
70°	19414.9	14147.1	3026.7	615.1	420.2	314.6	286.2	253.7	215.2	201.0	198.9
72.5°	16660.2	11045.2	1680.8	521.7	349.2	286.2	280.1	255.8	205.0	184.7	182.7
75°	12782.9	7764.7	1000.8	440.5	294.3	261.9	265.9	245.6	188.8	166.5	166.5
77.5°	7988.0	3566.7	745.0	345.1	239.5	227.4	231.4	217.2	170.5	152.2	152.2
80°	2728.3	1609.8	562.3	265.9	172.5	176.6	190.8	182.7	152.2	138.0	136.0
82.5°	1494.1	1047.5	397.9	184.7	119.8	146.2	146.2	148.2	131.9	121.8	119.8
85°	812.0	546.1	245.6	111.6	85.3	107.6	103.5	111.6	107.6	99.5	97.4
87.5°	282.2	186.8	81.2	40.6	34.5	36.5	42.6	56.8	54.8	56.8	58.9
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)