

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: P510780

Luminaire Tested: **CST-CA8-330-730-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-330-730-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42531 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

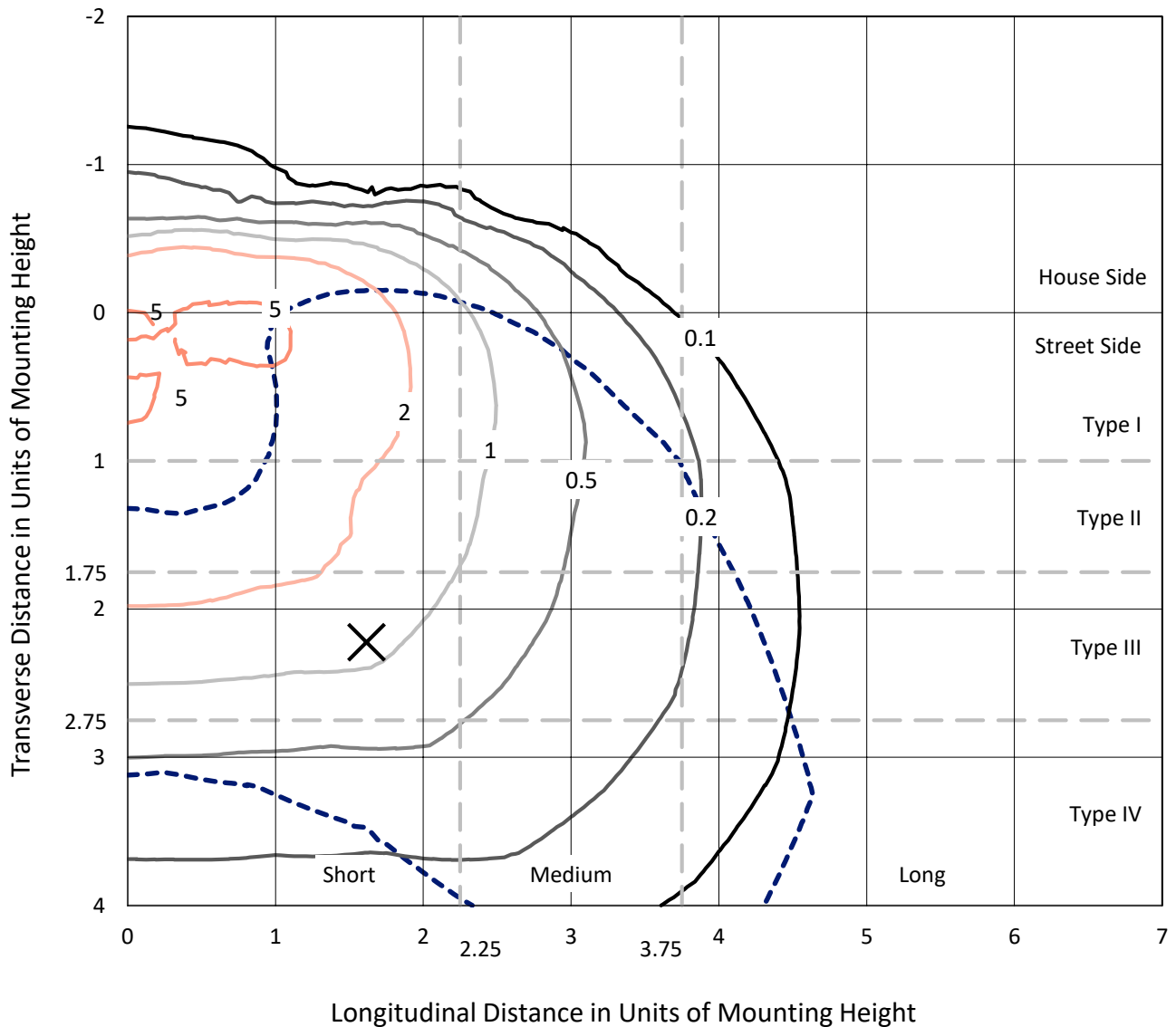
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510780
 CATALOG NUMBER: CST-CA8-330-730-U-T4-HSS

Iso-Footcandle Lines of Horizontal Illumination

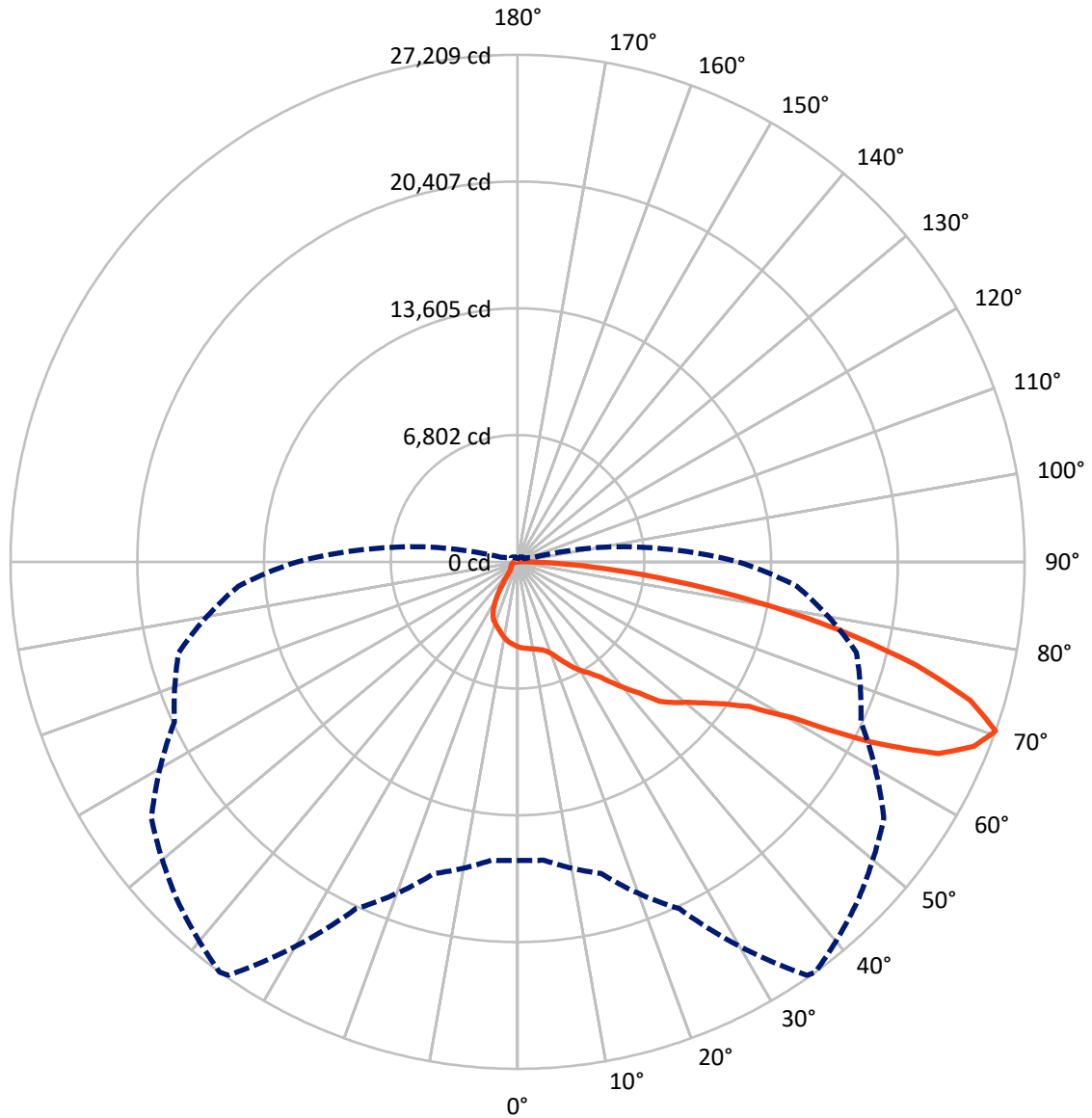
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P510780
CATALOG NUMBER: CST-CA8-330-730-U-T4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P510780
 CATALOG NUMBER: CST-CA8-330-730-U-T4-HSS

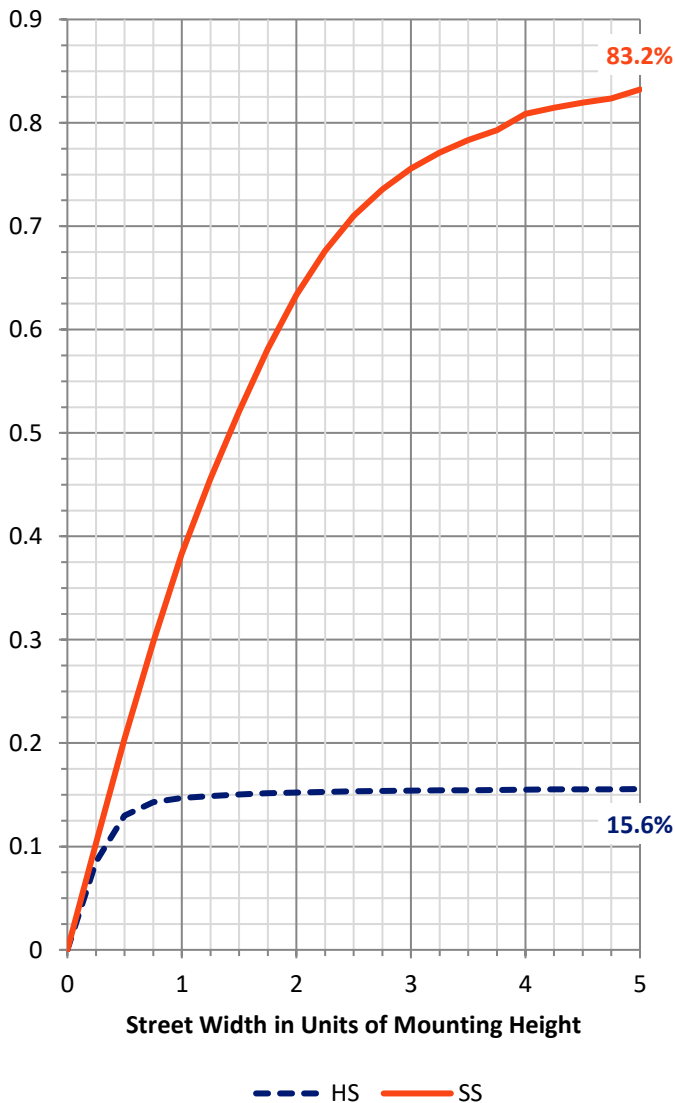
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6711.7	0.0	6711.7
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	35819.3	0.0	35819.3
	% Fixture	84.2	0.0	84.2
Total	Lumens	42531.0	0.0	42531.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	432.2	1.0
10°-20°	1285.3	3.0
20°-30°	2311.2	5.4
30°-40°	3657.5	8.6
40°-50°	5716.0	13.4
50°-60°	8208.1	19.3
60°-70°	11133.5	26.2
70°-80°	8240.0	19.4
80°-90°	1547.2	3.6
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°	42531.0	100.0
0°-180°	42531.0	100.0

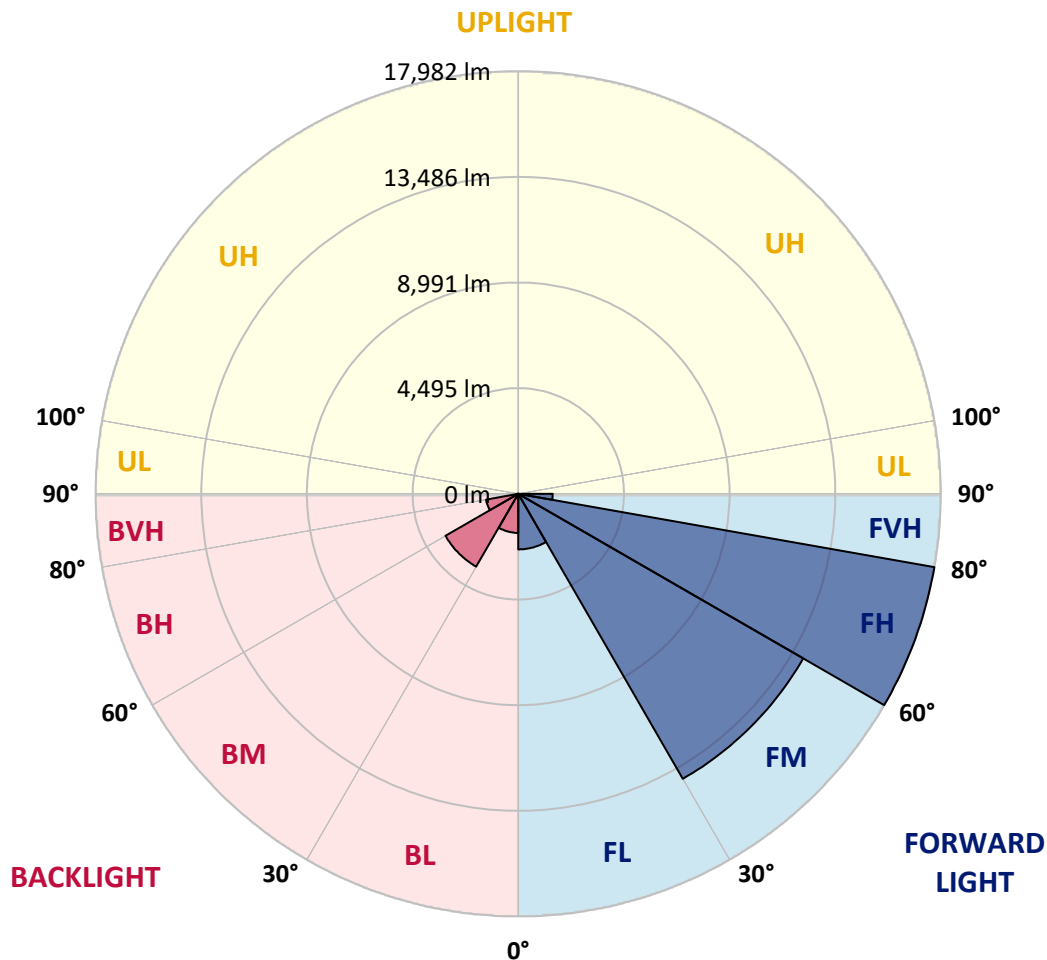


REPORT NUMBER: P510780
 CATALOG NUMBER: CST-CA8-330-730-U-T4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2365.6	5.6			
FM (30°-60°)	14005.1	32.9			
FH (60°-80°)	17981.7	42.3			G5
FVH (80°-90°)	1467.0	3.4			G5
BL (0°-30°)	1663.1	3.9	B3/2500		
BM (30°-60°)	3576.5	8.4	B3/5000		
BH (60°-80°)	1391.8	3.3	B3/2500		G3/2500
BVH (80°-90°)	80.2	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-G5
 Type IV Short





REPORT NUMBER: P510780

CATALOG NUMBER: CST-CA8-330-730-U-T4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0
2.5°	4649.3	4639.5	4631.6	4634.6	4628.7	4632.6	4623.8	4613.0	4587.4	4576.6	4571.7
5°	4690.5	4687.6	4679.7	4673.8	4663.0	4659.1	4649.3	4658.1	4644.4	4609.0	4588.4
7.5°	4715.1	4714.1	4705.3	4692.5	4698.4	4703.3	4713.1	4699.4	4681.7	4665.0	4622.8
10°	4725.9	4725.9	4715.1	4721.9	4752.4	4755.3	4760.2	4769.1	4752.4	4727.8	4685.6
12.5°	4753.4	4751.4	4755.3	4777.9	4809.3	4816.2	4840.8	4840.8	4842.7	4828.0	4778.9
15°	4822.1	4822.1	4830.9	4851.6	4905.6	4909.5	4945.8	4978.2	4982.1	4960.5	4923.2
17.5°	4981.2	4977.2	4972.3	4985.1	5043.0	5045.0	5107.8	5149.1	5159.9	5183.4	5177.5
20°	5283.6	5279.7	5278.7	5279.7	5275.7	5269.8	5331.7	5375.9	5430.9	5472.1	5492.7
22.5°	5716.6	5707.8	5707.8	5659.7	5622.3	5628.2	5638.1	5662.6	5735.3	5807.9	5885.5
25°	6183.0	6177.1	6182.0	6059.3	6009.2	6028.8	6016.1	6054.4	6149.6	6212.5	6294.9
27.5°	6564.0	6572.8	6545.3	6450.1	6417.7	6432.4	6403.0	6512.9	6618.0	6728.0	6852.7
30°	7038.2	6991.1	6923.4	6807.5	6795.7	6797.7	6795.7	6972.5	7190.4	7347.5	7520.4
32.5°	7657.8	7665.7	7513.5	7240.5	7140.4	7126.6	7165.9	7425.1	7719.7	8068.2	8296.0
35°	8284.3	8297.0	8186.1	7901.3	7615.6	7572.4	7514.5	7851.2	8276.4	8975.5	9319.2
37.5°	8949.0	8994.2	8862.6	8608.3	8269.5	8229.3	7955.3	8286.2	8914.6	10049.7	10500.4
40°	9838.6	9790.5	9631.4	9308.4	8993.2	8928.4	8610.3	8784.1	9735.5	11394.9	11721.9
42.5°	10494.5	10480.8	10346.3	10027.1	9710.0	9657.9	9401.7	9590.2	10769.4	12758.8	12905.1
45°	11014.9	11099.4	11096.4	10896.1	10717.4	10688.0	10536.7	10814.6	12019.4	14046.0	13974.4
47.5°	11477.4	11529.4	11446.0	11358.6	11275.1	11284.9	11396.9	11968.3	13296.9	15170.3	14853.2
50°	12234.4	12167.7	11793.6	11726.8	11844.6	11849.5	12190.3	13070.0	14703.9	16142.4	15597.4
52.5°	13243.8	13171.2	12402.3	12288.4	12567.3	12587.9	13154.5	14167.8	16155.2	17071.3	16337.8
55°	14746.1	14577.2	13753.4	13242.8	13370.5	13454.0	14140.3	15223.3	17291.2	17890.2	16898.5
57.5°	16591.1	16713.9	16291.6	15137.9	14606.7	14638.1	15268.5	16233.7	18293.7	18607.0	17226.4
60°	18541.2	18511.7	18688.4	18202.4	17185.2	17016.3	16695.2	17264.7	19070.4	19210.8	17564.2
62.5°	19609.5	19781.3	20370.4	20467.6	21385.7	21296.4	19107.7	18543.1	19967.9	19589.8	17656.5
65°	19603.6	19678.2	20775.0	21980.7	24848.9	24823.3	23806.1	20392.0	20636.5	19792.1	17471.9
67.5°	18336.9	18452.8	19735.2	22090.7	26449.4	26418.9	25715.9	22991.1	20846.7	19548.6	16610.8
70°	16027.5	16066.8	17317.7	20542.3	27092.5	27209.4	25781.7	23988.7	20324.3	18824.9	15040.7
72.5°	13222.2	13140.7	14364.2	17542.6	25454.7	25385.0	24691.8	22797.7	19444.5	17419.8	12266.8
75°	9735.5	9962.3	11060.1	14085.3	21794.2	22049.5	22356.8	20975.3	17269.6	14356.3	8482.6
77.5°	6428.5	6717.2	7826.7	10561.3	17253.9	17650.6	18446.9	17840.1	14049.0	10298.1	4039.5
80°	3321.8	3539.7	4538.3	7007.8	12369.0	12941.4	14401.5	13511.9	9960.4	4656.2	904.3
82.5°	1256.8	1228.4	2033.5	4011.0	7930.8	8451.2	9512.6	8102.6	3544.6	817.9	420.3
85°	551.8	584.2	842.5	1829.3	4534.4	4602.2	5388.7	3158.8	519.4	390.8	285.7
87.5°	238.6	273.9	353.5	526.3	1529.8	1766.4	2185.7	1003.5	157.1	135.5	143.4
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: P510780
 CATALOG NUMBER: CST-CA8-330-730-U-T4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0	4557.0
2.5°	4562.9	4557.0	4547.2	4522.6	4482.4	4477.5	4473.5	4469.6	4461.7	4465.7	4488.3
5°	4572.7	4561.9	4526.5	4491.2	4455.8	4424.4	4386.1	4371.4	4351.8	4339.0	4362.6
7.5°	4606.1	4583.5	4531.5	4483.3	4387.1	4341.0	4291.9	4233.9	4192.7	4166.2	4189.8
10°	4662.0	4633.6	4568.8	4469.6	4356.7	4230.0	4143.6	4047.4	3968.8	3947.2	3968.8
12.5°	4753.4	4711.1	4635.5	4501.0	4300.7	4134.8	3970.8	3844.1	3717.5	3681.1	3691.9
15°	4901.6	4868.2	4752.4	4566.8	4301.7	4048.4	3804.9	3600.6	3434.7	3376.7	3372.8
17.5°	5139.2	5103.9	4970.4	4697.4	4337.0	3980.6	3641.9	3330.6	3079.2	2951.6	2931.0
20°	5480.0	5430.9	5228.6	4889.8	4413.6	3951.2	3490.6	3072.4	2681.6	2442.0	2405.6
22.5°	5859.0	5806.9	5508.4	5038.1	4468.6	3893.2	3346.3	2786.6	2272.1	1979.5	1938.3
25°	6330.3	6216.4	5776.5	5178.5	4455.8	3771.5	3111.6	2398.8	1841.1	1587.7	1560.2
27.5°	6795.7	6651.4	6049.5	5252.2	4399.9	3578.0	2768.0	1945.1	1441.4	1261.7	1239.2
30°	7373.1	7094.2	6292.0	5286.5	4258.5	3288.4	2307.5	1478.7	1079.1	955.4	933.8
32.5°	8059.4	7637.2	6519.8	5248.2	4022.8	2846.5	1793.9	1083.0	802.2	724.6	723.7
35°	8964.7	8302.9	6770.2	5122.6	3661.5	2370.3	1257.8	740.4	625.5	599.0	603.9
37.5°	10023.2	9204.3	7024.5	4916.4	3253.0	1813.6	838.5	570.5	549.9	550.8	551.8
40°	11139.6	10199.9	7367.2	4626.7	2757.2	1312.8	603.9	512.6	511.6	521.4	524.3
42.5°	12206.0	11167.1	7789.4	4240.8	2237.7	868.0	523.4	489.0	476.2	480.1	483.1
45°	13196.7	11996.8	8148.8	3864.7	1681.0	619.6	513.5	461.5	441.9	439.9	441.9
47.5°	13995.0	12661.6	8367.7	3422.9	1197.9	514.5	492.9	436.0	408.5	402.6	399.6
50°	14602.8	13155.5	8447.3	2922.1	810.1	490.9	465.4	406.5	373.1	374.1	374.1
52.5°	15195.8	13604.2	8355.0	2417.4	596.0	470.3	446.8	382.9	347.6	366.2	371.2
55°	15623.0	13792.7	8085.9	1871.5	496.8	444.8	426.1	355.4	330.9	361.3	371.2
57.5°	15872.4	13941.0	7592.0	1351.1	455.6	420.3	399.6	329.9	307.3	315.2	320.1
60°	16027.5	13733.8	6939.1	924.0	434.0	400.6	373.1	313.2	282.8	264.1	261.2
62.5°	15942.1	13215.4	6078.9	635.3	411.4	379.0	350.5	297.5	257.3	232.7	230.7
65°	15245.9	12256.0	4667.0	514.5	397.7	369.2	336.8	282.8	239.6	216.0	213.1
67.5°	13954.7	10531.8	2725.7	457.6	391.8	359.4	326.0	269.0	229.8	204.2	200.3
70°	11832.8	7921.9	913.2	408.5	390.8	358.4	317.2	259.2	219.0	192.5	188.5
72.5°	8536.6	4779.9	444.8	359.4	365.3	343.7	310.3	251.4	212.1	178.7	171.8
75°	4851.6	1556.3	401.6	310.3	339.7	328.0	306.4	252.3	215.0	162.0	154.2
77.5°	1380.5	454.6	387.8	264.1	321.1	338.8	286.7	227.8	219.9	150.2	140.4
80°	466.4	404.5	374.1	205.2	259.2	279.8	248.4	200.3	221.9	136.5	126.7
82.5°	374.1	406.5	314.2	164.0	197.4	212.1	197.4	179.7	179.7	121.8	113.9
85°	299.5	377.0	199.3	130.6	147.3	163.0	139.4	134.5	125.7	102.1	99.2
87.5°	173.8	117.8	82.5	66.8	61.9	62.8	54.0	64.8	79.5	69.7	68.7
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)