

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: P398053

Luminaire Tested: **ARCH-S-PA1-80-730-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398053  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-80-730-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7108 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

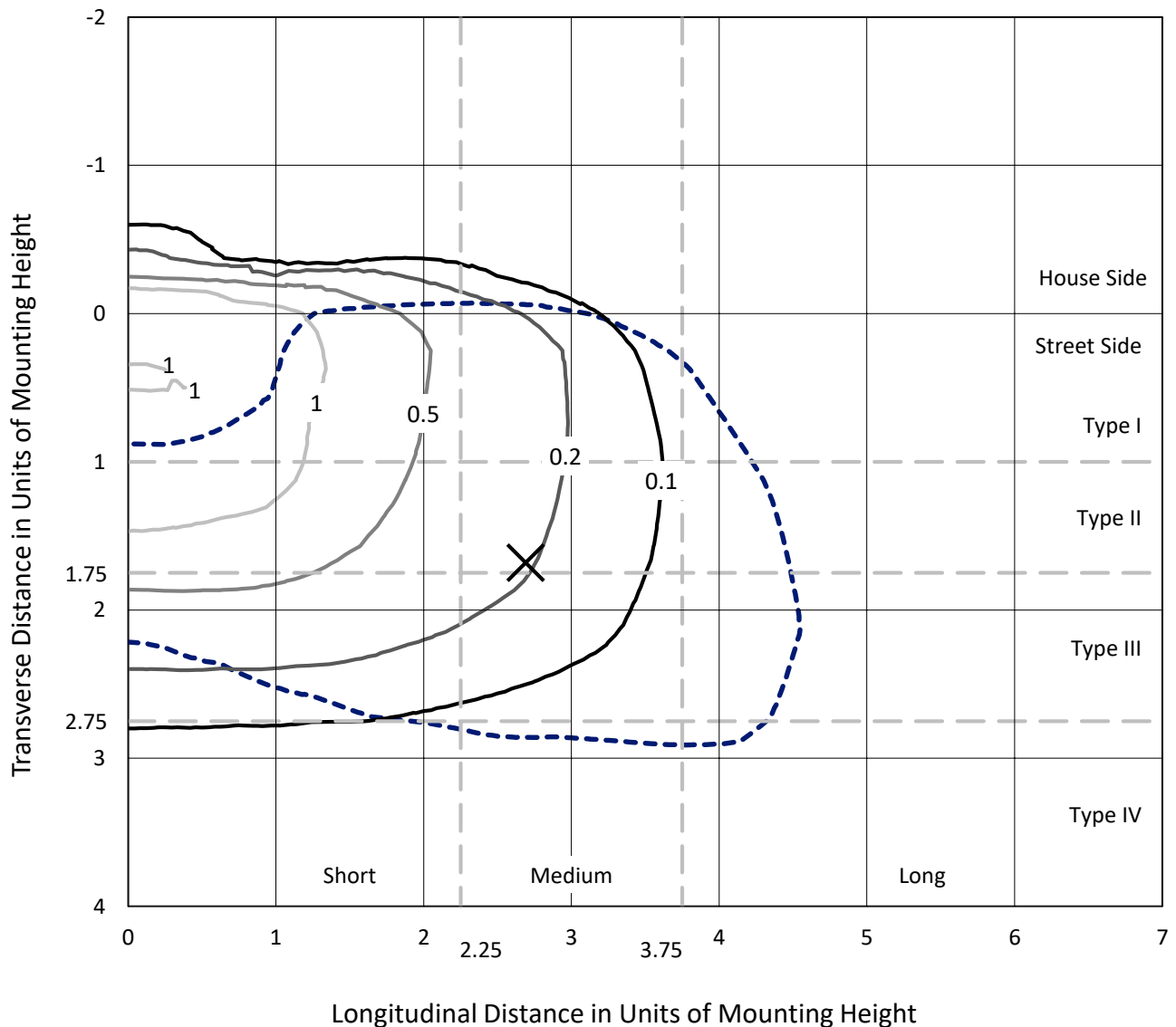


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

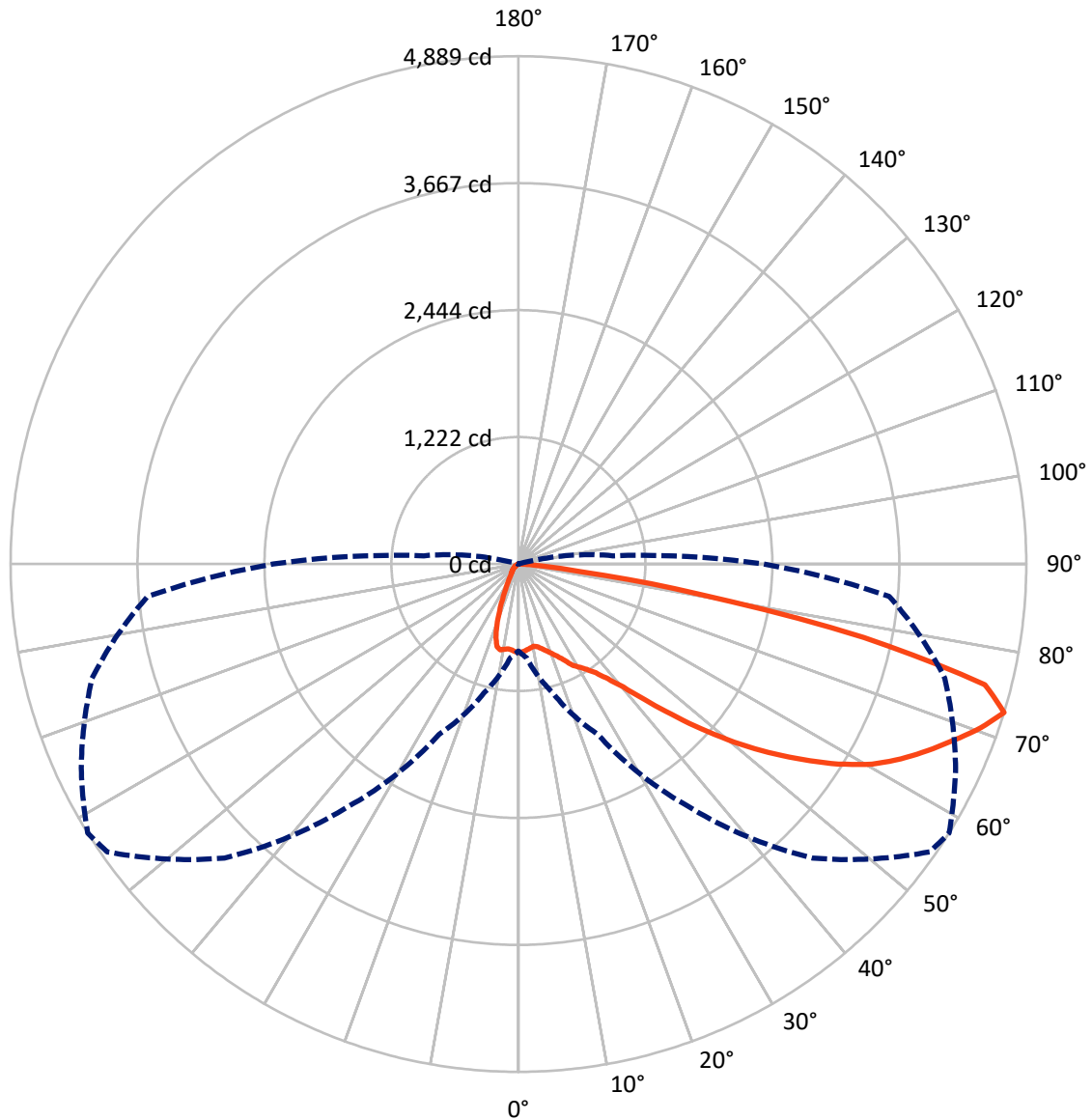


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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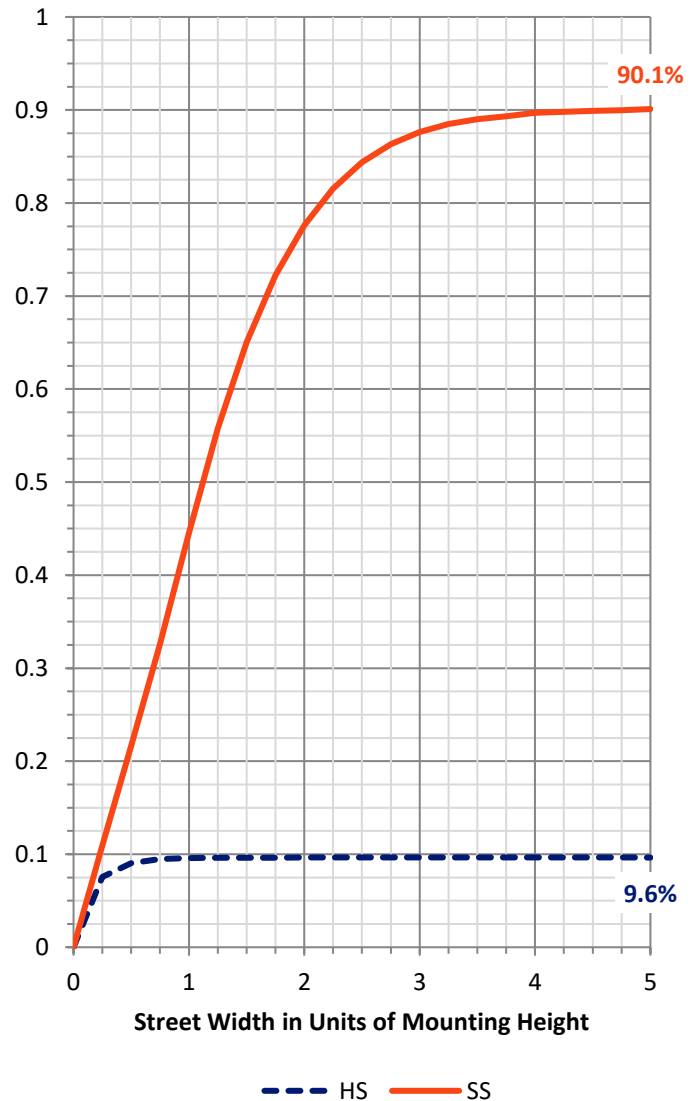
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	691.2	0.0	691.2
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	6416.8	0.0	6416.8
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	7108.0	0.0	7108.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.3	1.1
10°-20°	203.9	2.9
20°-30°	320.3	4.5
30°-40°	552.3	7.8
40°-50°	1050.9	14.8
50°-60°	1664.3	23.4
60°-70°	1942.0	27.3
70°-80°	1216.3	17.1
80°-90°	79.8	1.1
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°	7108.0	100.0
0°-180°	7108.0	100.0



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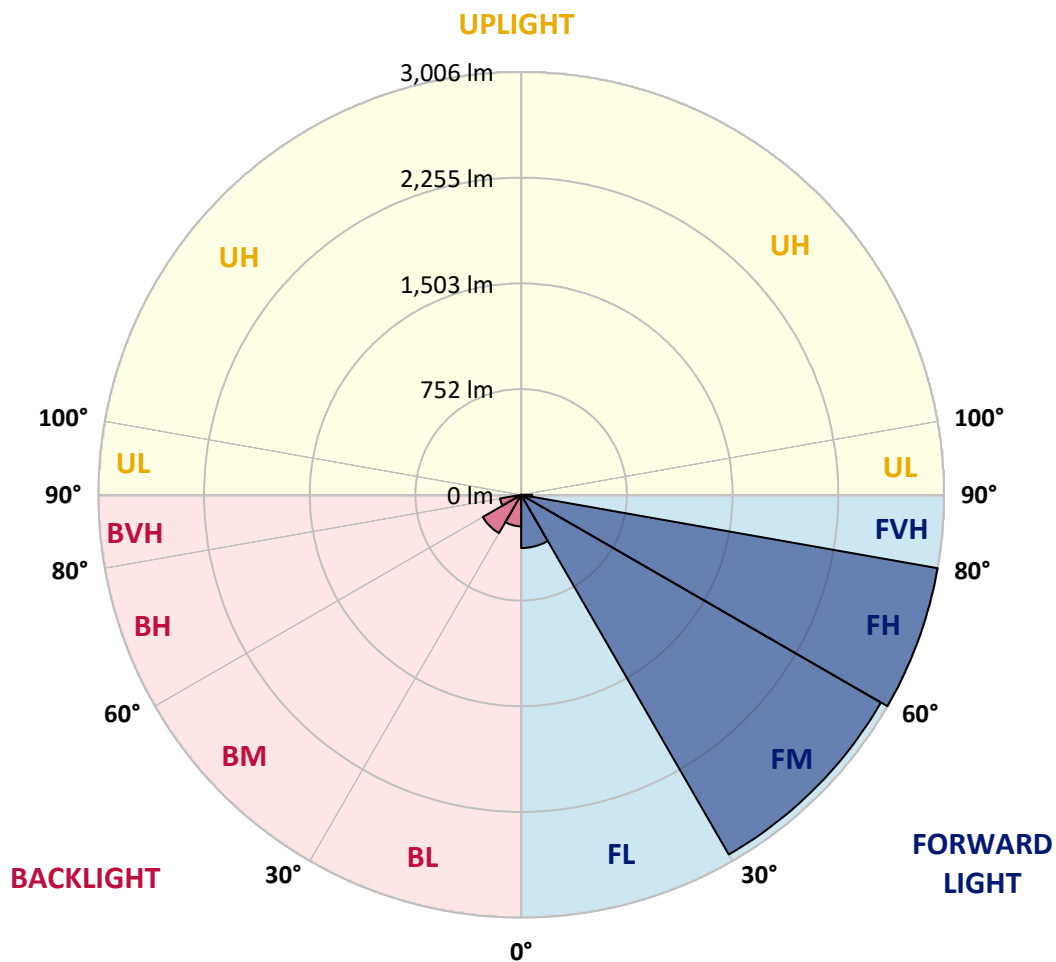
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	378.6	5.3			
FM	(30°-60°)	2953.0	41.5			
FH	(60°-80°)	3006.2	42.3			G2/5000
FVH	(80°-90°)	79.1	1.1			G1/100
BL	(0°-30°)	223.8	3.1	B1/500		
BM	(30°-60°)	314.5	4.4	B1/1000		
BH	(60°-80°)	152.1	2.1	B1/500		G1/500
BVH	(80°-90°)	0.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	852.9	852.9	852.9	852.9	852.9	852.9	852.9	852.9	852.9	852.9	852.9
2.5°	849.1	845.3	844.0	842.7	844.0	845.3	841.5	845.3	842.7	844.0	846.6
5°	818.6	814.8	813.5	814.8	818.6	825.0	827.5	831.3	831.3	835.1	836.4
7.5°	784.3	781.7	780.5	783.0	790.6	804.6	812.2	817.3	822.4	830.0	837.7
10°	765.2	763.9	762.7	766.5	774.1	786.8	797.0	804.6	823.7	845.3	859.3
12.5°	752.5	752.5	755.0	762.7	772.8	783.0	807.2	817.3	846.6	879.6	898.7
15°	742.3	742.3	746.1	760.1	774.1	798.3	833.8	845.3	879.6	920.3	945.7
17.5°	734.7	737.2	739.8	753.8	780.5	821.1	863.1	879.6	921.6	966.0	994.0
20°	736.0	738.5	739.8	753.8	791.9	847.8	901.2	920.3	968.6	1015.6	1043.6
22.5°	743.6	747.4	748.7	767.8	812.2	875.8	944.4	966.0	1018.2	1067.7	1089.3
25°	775.4	777.9	770.3	786.8	841.5	919.0	1000.4	1023.2	1075.4	1121.1	1138.9
27.5°	883.4	886.0	844.0	825.0	864.4	954.6	1069.0	1100.8	1165.6	1196.1	1198.7
30°	1117.3	1119.9	1037.2	947.0	919.0	985.1	1107.1	1151.6	1235.5	1269.8	1254.6
32.5°	1418.6	1416.0	1302.9	1169.4	1048.7	1038.5	1161.8	1208.8	1300.3	1333.4	1322.0
35°	1721.1	1724.9	1628.3	1427.5	1254.6	1138.9	1231.7	1286.4	1397.0	1444.0	1423.6
37.5°	1928.3	1953.7	1911.8	1694.4	1507.5	1324.5	1344.8	1403.3	1541.9	1605.4	1562.2
40°	2220.6	2214.3	2112.6	1952.4	1787.2	1599.1	1527.9	1555.8	1714.7	1799.9	1732.5
42.5°	2613.4	2600.7	2427.8	2271.5	2087.2	1933.4	1788.5	1783.4	1913.0	2012.2	1914.3
45°	2969.3	2950.3	2832.0	2680.8	2478.7	2302.0	2106.2	2061.7	2152.0	2235.9	2121.5
47.5°	3252.8	3221.0	3137.1	3057.0	3007.5	2732.9	2439.3	2371.9	2417.7	2479.9	2318.5
50°	3588.4	3500.6	3378.6	3330.3	3433.3	3221.0	2759.6	2694.8	2692.2	2727.8	2521.9
52.5°	3740.9	3582.0	3513.4	3554.0	3735.8	3674.8	3105.3	3012.5	2975.7	2979.5	2711.3
55°	3556.6	3538.8	3575.6	3702.8	3940.4	3904.9	3437.1	3322.7	3268.0	3199.4	2893.1
57.5°	3346.8	3401.5	3547.7	3790.5	4199.8	4145.1	3763.8	3634.1	3533.7	3376.1	3095.2
60°	3153.6	3209.6	3451.1	3810.8	4342.1	4376.4	4035.8	3912.5	3763.8	3556.6	3317.6
62.5°	2860.0	2903.2	3242.6	3781.6	4279.8	4511.2	4225.2	4132.4	3993.8	3728.2	3573.1
65°	2529.5	2557.5	2893.1	3547.7	4157.8	4495.9	4381.5	4329.4	4194.7	3907.4	3826.0
67.5°	2167.2	2200.3	2479.9	3126.9	3918.8	4424.7	4529.0	4523.9	4370.1	4105.7	4009.1
70°	1750.3	1752.9	1984.2	2593.1	3501.9	4282.4	4712.0	4723.5	4537.9	4254.4	4016.7
72.5°	837.7	906.3	1286.4	1810.1	2846.0	4002.7	4831.5	4888.7	4643.4	4249.3	3583.3
75°	191.9	198.3	375.0	860.5	1669.0	3072.3	4532.8	4639.6	4386.6	3674.8	2524.4
77.5°	69.9	73.7	105.5	251.7	641.9	1587.6	3243.9	3400.2	3242.6	2375.7	1193.6
80°	47.0	45.8	54.7	111.9	294.9	450.0	1658.8	1751.6	1599.1	811.0	286.0
82.5°	24.2	25.4	38.1	62.3	198.3	156.3	554.2	602.5	495.7	162.7	53.4
85°	11.4	11.4	21.6	39.4	83.9	54.7	123.3	148.7	133.5	71.2	17.8
87.5°	11.4	11.4	20.3	25.4	43.2	22.9	30.5	38.1	35.6	38.1	6.4
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°	852.9	852.9	852.9	852.9	852.9	852.9	852.9	852.9	852.9	852.9	852.9
2.5°	846.6	845.3	844.0	846.6	845.3	847.8	847.8	850.4	850.4	847.8	846.6
5°	835.1	832.6	830.0	830.0	828.8	831.3	838.9	845.3	846.6	842.7	841.5
7.5°	836.4	836.4	833.8	828.8	819.9	819.9	819.9	827.5	831.3	828.8	827.5
10°	859.3	860.5	854.2	842.7	827.5	813.5	786.8	747.4	710.6	700.4	696.6
12.5°	898.7	899.9	887.2	866.9	835.1	752.5	650.8	556.7	484.3	464.0	460.1
15°	945.7	947.0	924.1	891.1	794.4	602.5	451.2	344.5	280.9	265.7	264.4
17.5°	994.0	991.5	957.1	893.6	673.7	427.1	274.6	219.9	203.4	199.6	200.8
20°	1041.0	1033.4	986.4	846.6	518.6	279.6	200.8	188.1	184.3	181.8	181.8
22.5°	1084.3	1069.0	1010.5	753.8	363.5	200.8	179.2	176.7	171.6	167.8	166.5
25°	1127.5	1105.9	1025.8	633.0	244.1	175.4	169.1	164.0	157.6	152.5	151.3
27.5°	1179.6	1149.1	1018.2	480.5	183.0	162.7	157.6	150.0	141.1	133.5	130.9
30°	1229.2	1194.8	974.9	331.8	156.3	150.0	142.4	130.9	119.5	110.6	108.0
32.5°	1291.5	1252.0	897.4	217.4	136.0	130.9	123.3	109.3	94.1	83.9	81.4
35°	1380.4	1335.9	798.3	152.5	119.5	110.6	100.4	85.2	68.6	61.0	59.7
37.5°	1505.0	1445.3	673.7	123.3	105.5	92.8	77.5	62.3	50.8	44.5	43.2
40°	1657.5	1566.0	535.1	109.3	94.1	77.5	58.5	44.5	36.9	31.8	31.8
42.5°	1822.8	1679.1	394.0	100.4	82.6	63.6	43.2	31.8	26.7	24.2	22.9
45°	1993.1	1779.6	265.7	92.8	72.5	48.3	30.5	21.6	17.8	17.8	16.5
47.5°	2169.8	1846.9	171.6	83.9	61.0	35.6	20.3	15.3	12.7	12.7	12.7
50°	2345.2	1882.5	122.0	76.3	49.6	24.2	15.3	11.4	10.2	10.2	10.2
52.5°	2472.3	1859.6	97.9	66.1	38.1	17.8	11.4	8.9	7.6	7.6	7.6
55°	2582.9	1820.2	85.2	57.2	28.0	12.7	8.9	7.6	6.4	6.4	6.4
57.5°	2696.0	1769.4	76.3	48.3	20.3	8.9	6.4	5.1	5.1	5.1	5.1
60°	2799.0	1683.0	66.1	38.1	14.0	6.4	5.1	3.8	3.8	3.8	3.8
62.5°	2899.4	1609.2	57.2	29.2	10.2	5.1	2.5	2.5	1.3	1.3	1.3
65°	2956.6	1510.1	45.8	19.1	6.4	3.8	1.3	1.3	0.0	0.0	0.0
67.5°	2938.8	1391.9	31.8	11.4	3.8	2.5	1.3	0.0	0.0	0.0	0.0
70°	2815.5	1233.0	19.1	6.4	3.8	2.5	1.3	0.0	0.0	0.0	0.0
72.5°	2357.9	912.7	11.4	5.1	2.5	1.3	0.0	0.0	0.0	0.0	0.0
75°	1574.9	419.5	6.4	3.8	1.3	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	720.7	125.8	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	144.9	33.0	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	30.5	6.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.4	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)