

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: P214801

Luminaire Tested: **ARCH-AF24-60-D-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214801  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF24-60-D-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 800mA 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: 5578.1 lumens  
Efficiency: N/A  
Efficacy: 87.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

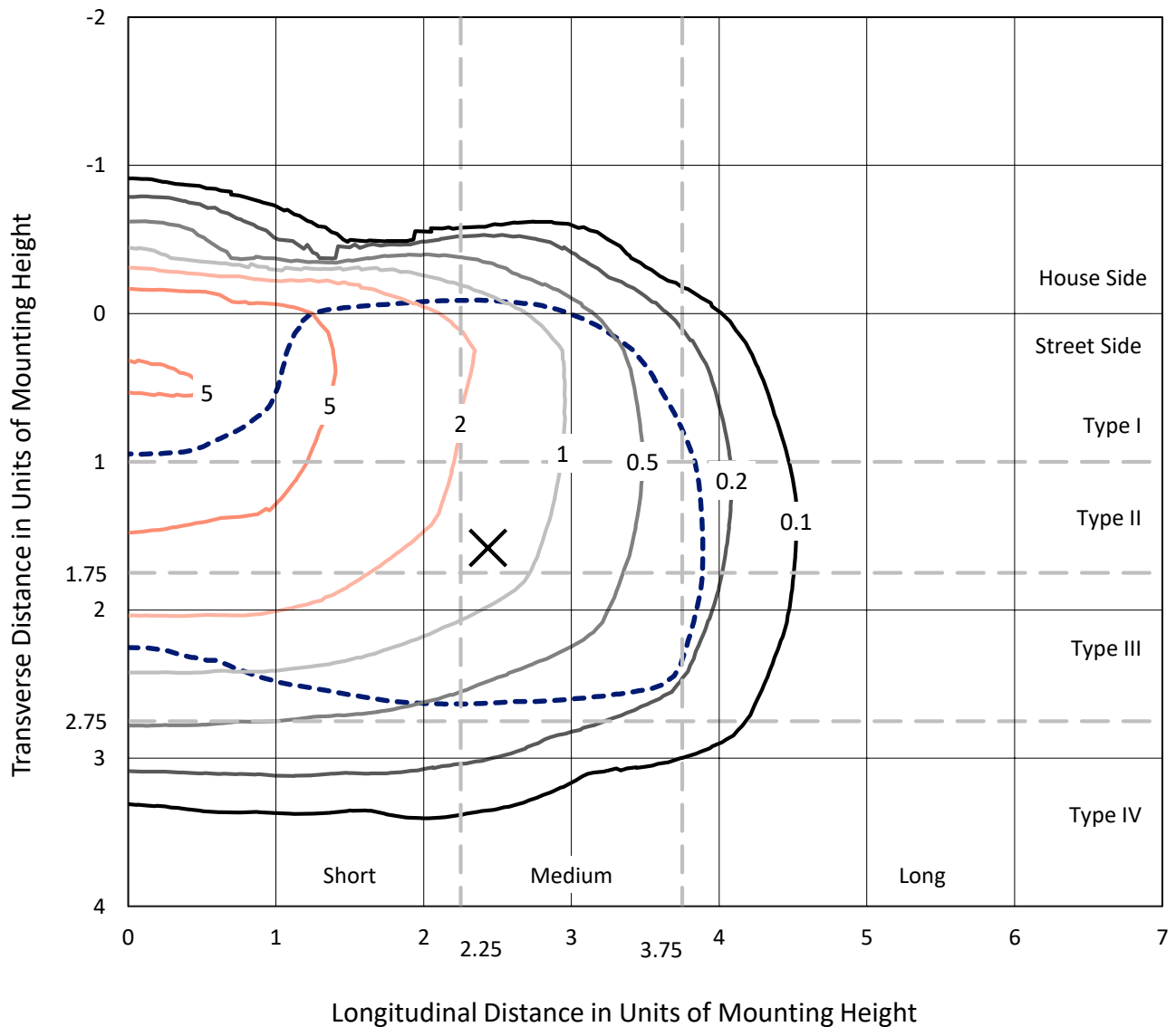
Input Watts (W): 64  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

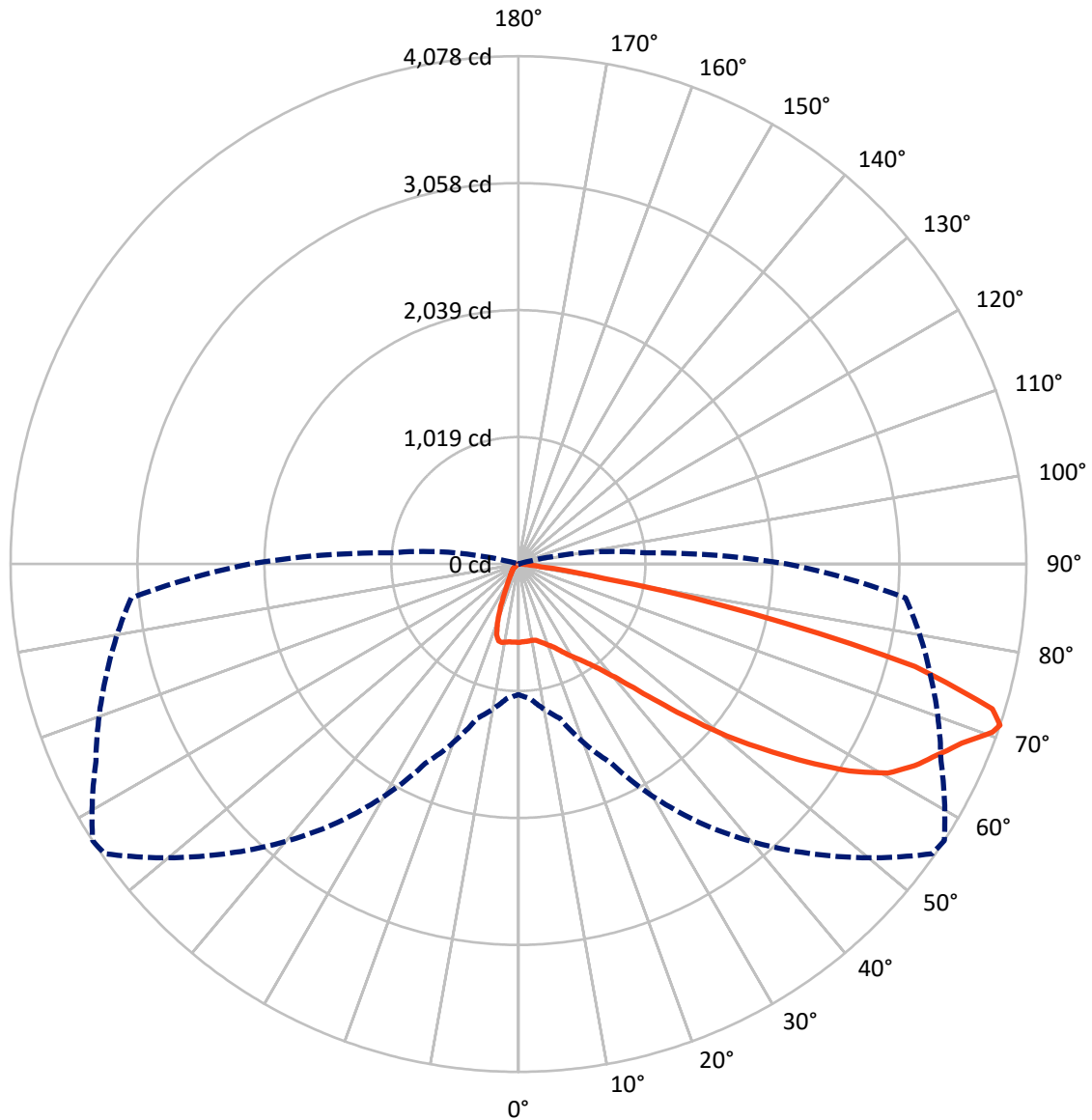


Based on 10 foot mounting height. Maximum calculated value = 7.8 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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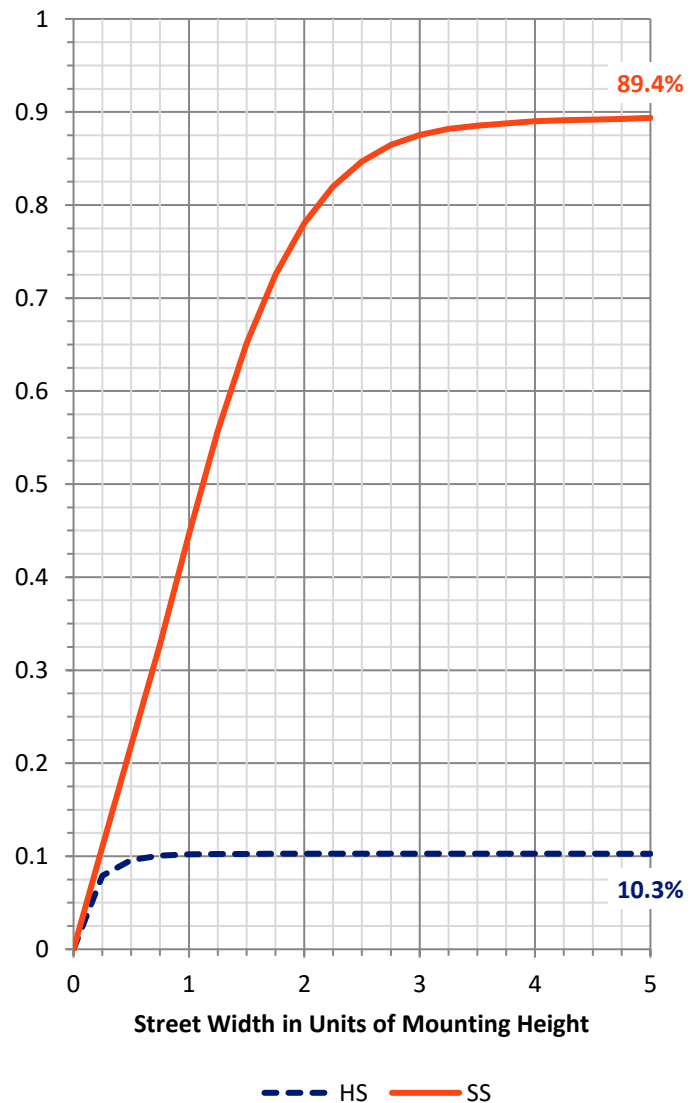
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	578.1	0.0	578.1
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	5000.1	0.0	5000.1
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	5578.1	0.0	5578.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.2	1.1
10°-20°	158.3	2.8
20°-30°	246.9	4.4
30°-40°	417.4	7.5
40°-50°	810.7	14.5
50°-60°	1361.3	24.4
60°-70°	1624.6	29.1
70°-80°	856.2	15.3
80°-90°	43.5	0.8
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°	5578.1	100.0
0°-180°	5578.1	100.0

**Coefficient of Utilization**



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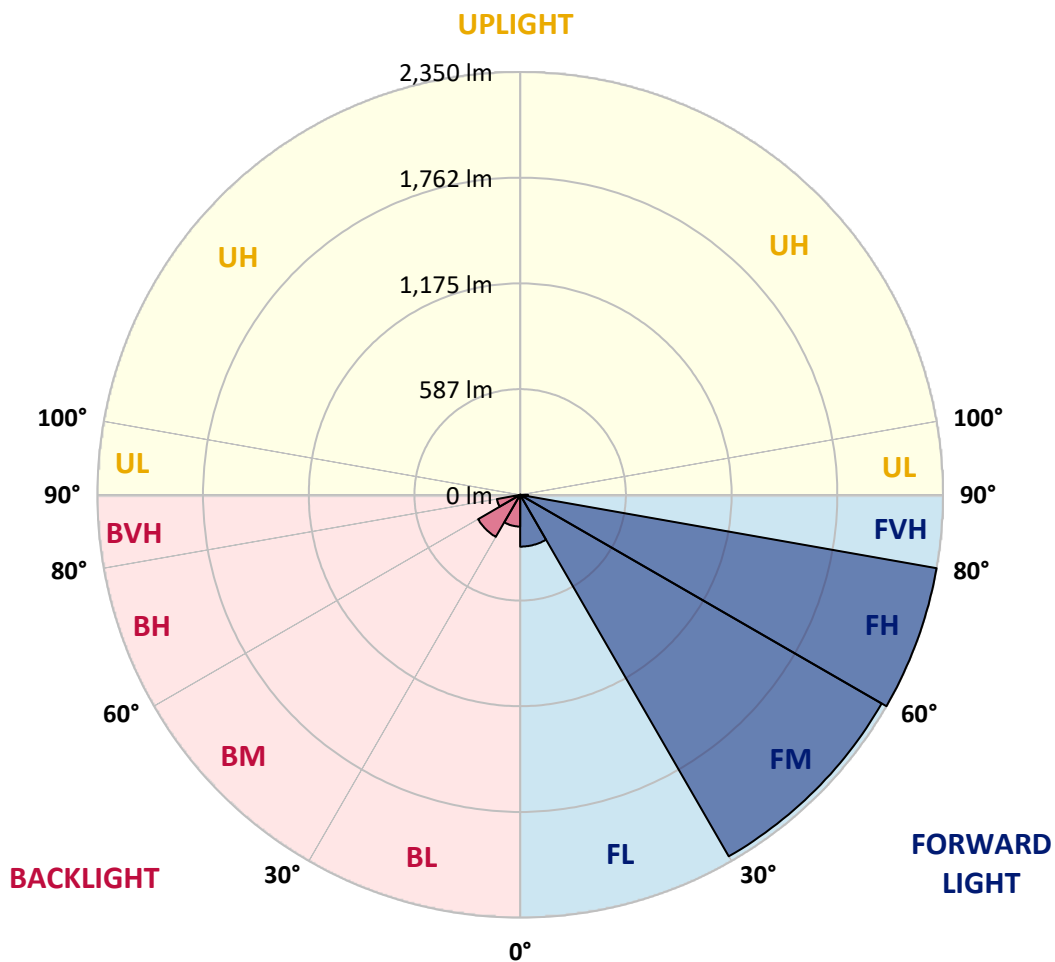
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	288.0	5.2			
FM	(30°-60°)	2319.4	41.6			
FH	(60°-80°)	2349.5	42.1			G2/5000
FVH	(80°-90°)	43.1	0.8			G1/100
BL	(0°-30°)	176.5	3.2	B1/500		
BM	(30°-60°)	269.9	4.8	B1/1000		
BH	(60°-80°)	131.3	2.4	B1/500		G1/500
BVH	(80°-90°)	0.4	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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	630.4	630.4	630.4	630.4	630.4	630.4	630.4	630.4	630.4	630.4	630.4
2.5°	621.3	621.3	621.3	622.6	623.9	623.9	626.6	625.2	625.2	625.2	627.8
5°	604.5	605.7	607.0	609.6	614.8	618.7	625.2	625.2	626.6	629.1	630.4
7.5°	581.0	582.4	586.3	591.5	601.8	610.9	621.3	623.9	627.8	634.3	636.9
10°	566.7	569.4	574.5	581.0	592.7	604.5	617.5	621.3	633.0	644.7	651.2
12.5°	562.8	564.2	569.4	579.7	594.0	608.3	625.2	629.1	646.0	664.2	674.6
15°	569.4	570.6	573.3	584.9	601.8	620.0	642.1	647.3	668.1	689.0	701.9
17.5°	581.0	581.0	583.6	594.0	612.2	633.0	661.6	669.4	692.8	716.2	730.5
20°	588.8	588.8	592.7	603.1	623.9	651.2	685.0	695.4	721.4	747.4	760.4
22.5°	596.6	597.9	601.8	613.6	636.9	674.6	713.6	724.0	753.9	781.2	794.2
25°	618.7	617.5	618.7	629.1	656.4	703.2	752.6	765.6	796.8	826.6	833.2
27.5°	679.9	677.2	660.3	653.8	674.6	733.1	802.0	815.0	851.4	881.3	881.3
30°	820.2	815.0	773.4	720.1	703.2	760.4	848.7	867.0	913.8	939.8	932.0
32.5°	998.3	986.5	933.2	842.3	774.7	796.8	898.2	919.0	978.8	1000.9	984.0
35°	1193.3	1191.9	1125.7	1008.6	912.5	872.2	961.9	986.5	1061.9	1081.5	1054.2
37.5°	1399.9	1405.1	1360.9	1199.7	1086.7	995.6	1046.4	1074.9	1167.3	1190.6	1164.6
40°	1630.0	1628.6	1611.8	1420.7	1296.0	1171.2	1168.5	1194.5	1306.3	1342.7	1306.3
42.5°	1921.1	1918.5	1857.5	1685.9	1549.4	1399.9	1346.6	1355.7	1480.5	1540.3	1487.0
45°	2217.6	2199.3	2129.1	1980.9	1860.0	1683.3	1581.9	1581.9	1688.5	1770.3	1687.2
47.5°	2382.6	2364.3	2335.8	2253.9	2217.6	2019.9	1870.5	1852.3	1935.4	2018.6	1901.7
50°	2599.6	2599.6	2528.1	2496.9	2559.3	2420.3	2188.9	2170.7	2211.0	2277.3	2124.0
52.5°	2771.3	2740.1	2689.3	2716.7	2894.7	2831.0	2507.4	2472.3	2503.5	2520.3	2317.6
55°	2842.7	2812.8	2808.9	2909.0	3184.5	3096.2	2833.6	2802.4	2799.8	2716.7	2486.6
57.5°	2857.0	2831.0	2880.4	3055.9	3466.7	3313.2	3158.6	3135.1	3062.4	2854.4	2659.5
60°	2736.1	2749.2	2868.8	3136.5	3633.0	3501.8	3432.8	3408.2	3240.5	2971.4	2851.8
62.5°	2487.8	2519.0	2742.6	3144.2	3571.9	3578.4	3584.9	3568.1	3378.3	3078.0	3045.5
65°	2194.1	2203.2	2472.3	3036.4	3465.3	3555.1	3696.7	3695.4	3483.6	3197.5	3263.8
67.5°	1808.1	1823.6	2056.3	2672.5	3252.2	3544.6	3843.6	3839.6	3603.1	3334.1	3393.8
70°	1345.3	1364.8	1553.2	2078.4	2776.4	3414.6	4036.0	4038.6	3729.2	3438.0	3304.1
71°	1048.9	1084.0	1281.7	1765.2	2533.3	3283.4	4054.2	4077.6	3743.5	3423.7	3119.6
72.5°	514.7	556.3	804.6	1242.7	2084.9	2989.6	3934.6	3980.1	3653.8	3245.6	2667.2
75°	133.9	141.7	240.5	508.2	1117.9	1980.9	3172.9	3288.6	2987.0	2470.9	1630.0
77.5°	84.5	87.1	113.0	197.5	418.6	752.6	1863.9	1921.1	1706.7	1251.7	574.5
80°	59.8	61.1	71.5	127.4	244.4	219.6	670.7	695.4	617.5	331.4	102.7
82.5°	36.4	36.4	52.0	81.9	150.8	119.6	176.8	188.4	166.3	92.3	33.8
85°	20.8	22.1	32.5	55.9	71.5	58.5	66.3	70.2	71.5	61.1	14.3
87.5°	16.9	18.2	28.6	46.7	39.0	28.6	28.6	29.9	31.2	36.4	6.5
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°	630.4	630.4	630.4	630.4	630.4	630.4	630.4	630.4	630.4	630.4	630.4
2.5°	627.8	627.8	629.1	627.8	627.8	627.8	629.1	629.1	629.1	631.7	633.0
5°	630.4	630.4	630.4	629.1	627.8	627.8	630.4	631.7	631.7	635.7	635.7
7.5°	636.9	636.9	634.3	631.7	629.1	625.2	626.6	627.8	626.6	627.8	627.8
10°	651.2	651.2	647.3	642.1	634.3	622.6	607.0	587.5	569.4	562.8	560.3
12.5°	674.6	673.3	665.5	656.4	639.5	599.2	540.7	471.9	414.6	399.1	393.8
15°	700.6	698.0	689.0	673.3	627.8	521.2	399.1	310.7	256.0	243.1	240.5
17.5°	727.9	724.0	711.1	679.9	574.5	387.4	257.4	195.0	165.1	162.4	163.8
20°	756.5	751.3	733.1	666.9	464.0	258.7	166.3	150.8	148.2	148.2	149.5
22.5°	789.0	782.5	757.8	620.0	338.0	171.5	143.0	141.7	140.3	139.1	139.1
25°	826.6	818.9	781.2	535.5	232.6	140.3	136.5	132.6	130.0	127.4	126.1
27.5°	872.2	861.7	799.4	431.6	159.9	131.2	128.7	122.1	117.0	111.8	111.8
30°	917.7	904.7	794.2	325.0	130.0	122.1	117.0	109.1	101.4	96.2	94.9
32.5°	965.8	952.8	760.4	218.4	118.3	111.8	105.3	93.6	84.5	77.9	76.7
35°	1037.3	1026.8	694.1	144.2	106.6	98.8	89.7	77.9	66.3	59.8	58.5
37.5°	1143.9	1130.9	612.2	110.5	93.6	81.9	74.1	61.1	49.4	42.9	41.6
40°	1286.9	1247.8	514.7	97.5	81.9	67.6	57.2	44.2	35.1	31.2	31.2
42.5°	1453.2	1360.9	409.5	88.4	72.8	55.9	41.6	29.9	24.7	23.4	23.4
45°	1630.0	1466.2	304.1	81.9	63.7	44.2	29.9	20.8	18.2	16.9	16.9
47.5°	1812.0	1552.0	211.9	74.1	53.3	33.8	20.8	15.5	13.0	11.7	11.7
50°	1982.3	1607.9	149.5	66.3	45.5	24.7	15.5	11.7	9.1	9.1	9.1
52.5°	2100.5	1602.7	107.9	57.2	35.1	16.9	10.4	7.8	7.8	7.8	7.8
55°	2204.5	1583.2	84.5	49.4	27.3	11.7	7.8	6.5	6.5	5.2	5.2
57.5°	2292.8	1552.0	71.5	40.3	19.5	9.1	5.2	5.2	3.9	3.9	3.9
60°	2368.2	1513.0	59.8	33.8	13.0	6.5	3.9	2.6	2.6	1.3	2.6
62.5°	2470.9	1488.3	52.0	26.0	9.1	3.9	2.6	1.3	1.3	0.0	0.0
65°	2546.3	1441.5	44.2	18.2	5.2	2.6	1.3	1.3	0.0	0.0	0.0
67.5°	2549.0	1357.0	32.5	10.4	3.9	2.6	1.3	0.0	0.0	0.0	0.0
70°	2343.6	1156.9	20.8	5.2	2.6	1.3	1.3	0.0	0.0	0.0	0.0
71°	2155.2	1024.3	16.9	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	1775.5	752.6	13.0	3.9	1.3	1.3	0.0	0.0	0.0	0.0	0.0
75°	978.8	272.9	6.5	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	313.2	83.2	3.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	53.3	13.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	18.2	5.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	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)