

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: P214782

Luminaire Tested: **ARCH-AF16-60-D-U-T3-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214782  
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-AF16-60-D-U-T3-7030-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4656.6 lumens  
Efficiency: N/A  
Efficacy: 73.9 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): 63  
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

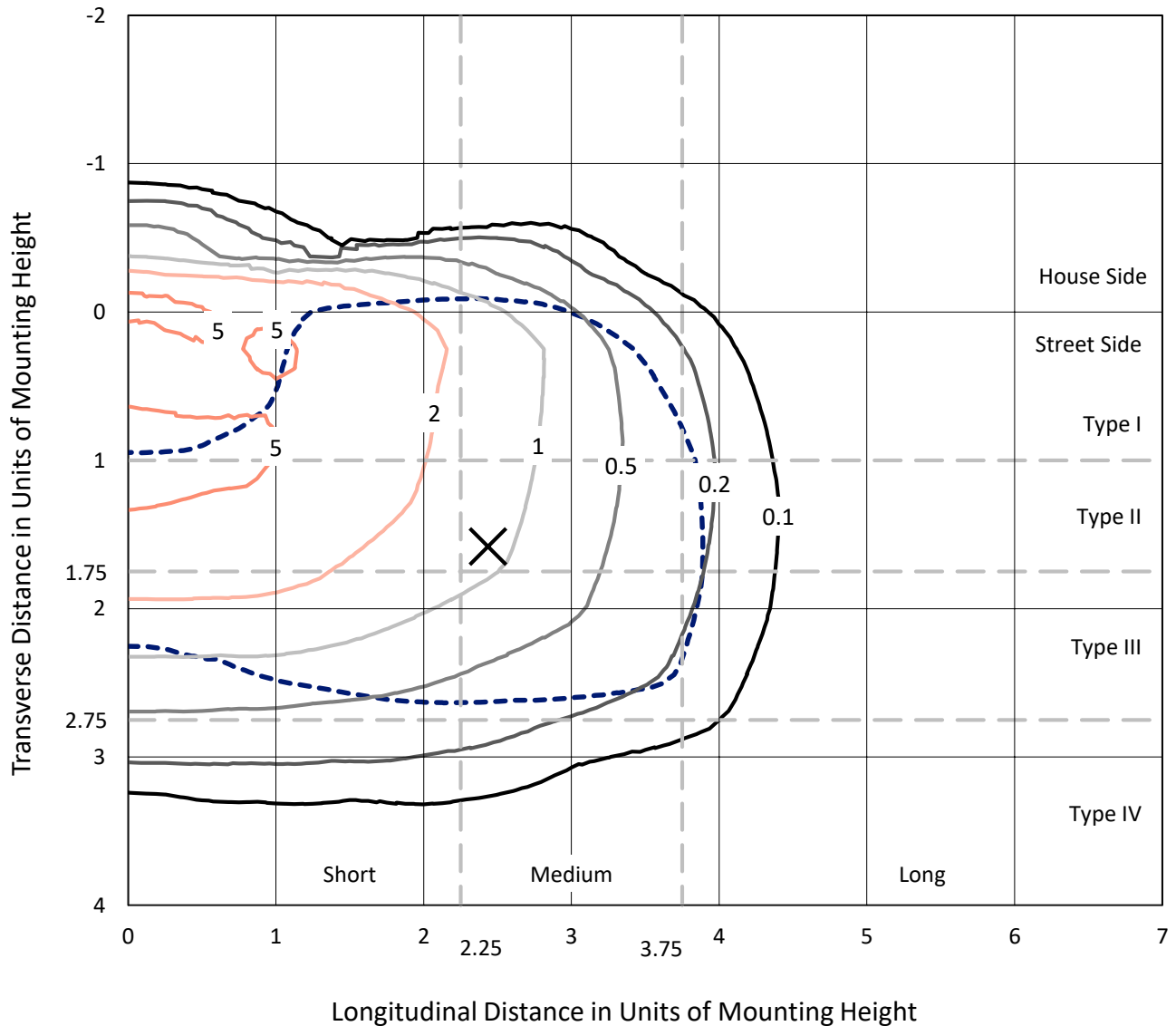


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

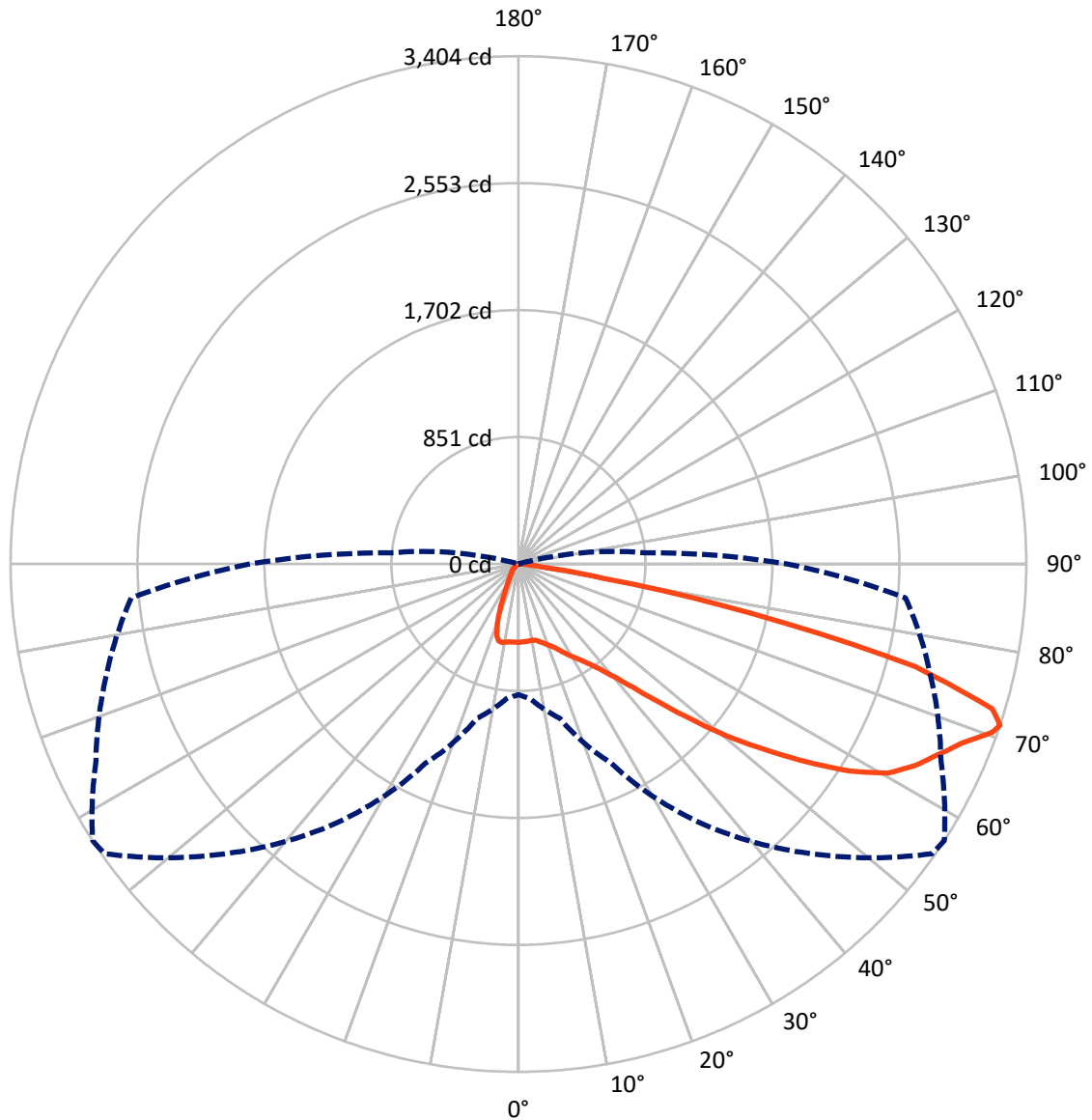


Based on 10 foot mounting height. Maximum calculated value = 6.5 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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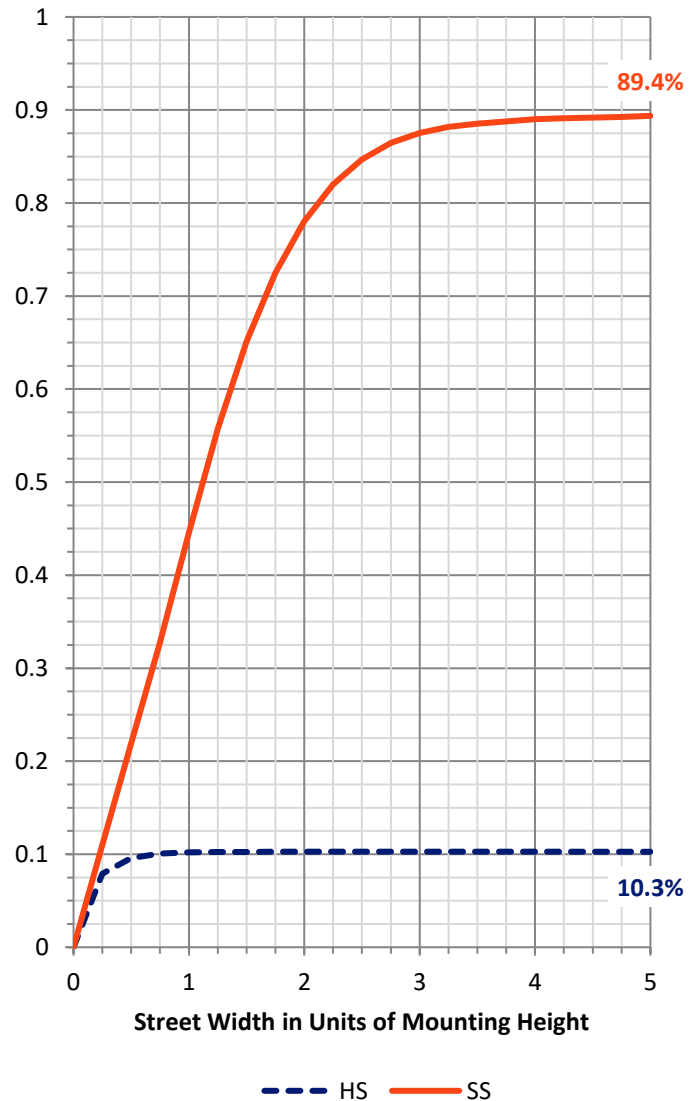
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	482.6	0.0	482.6
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	4174.1	0.0	4174.1
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	4656.6	0.0	4656.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.4	1.1
10°-20°	132.1	2.8
20°-30°	206.1	4.4
30°-40°	348.4	7.5
40°-50°	676.7	14.5
50°-60°	1136.4	24.4
60°-70°	1356.2	29.1
70°-80°	714.8	15.3
80°-90°	36.3	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°	4656.6	100.0
0°-180°	4656.6	100.0

**Coefficient of Utilization**



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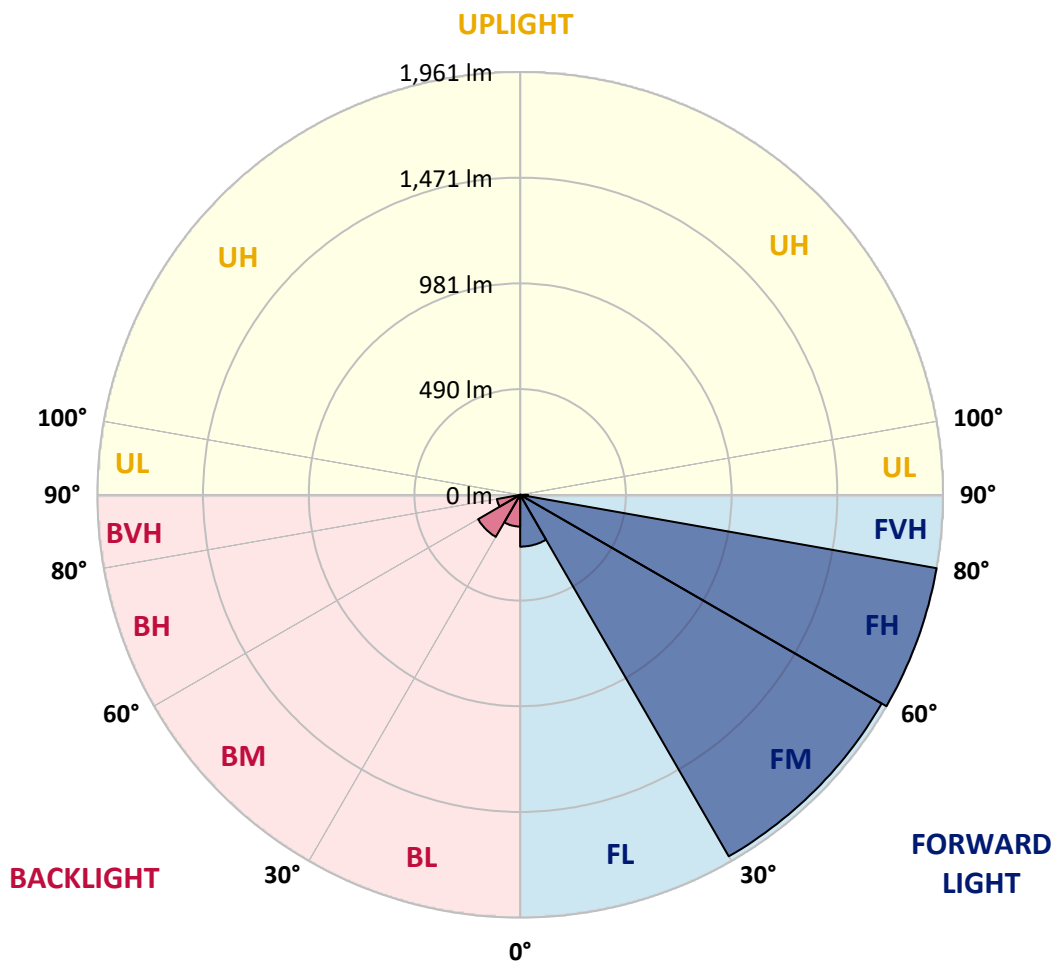
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	240.4	5.2			
FM	(30°-60°)	1936.3	41.6			
FH	(60°-80°)	1961.4	42.1			G2/5000
FVH	(80°-90°)	36.0	0.8			G1/100
BL	(0°-30°)	147.3	3.2	B1/500		
BM	(30°-60°)	225.3	4.8	B1/1000		
BH	(60°-80°)	109.6	2.4	B0/110		G0/110
BVH	(80°-90°)	0.3	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°	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3
2.5°	518.7	518.7	518.7	519.7	520.8	520.8	523.1	521.9	521.9	521.9	524.1
5°	504.6	505.7	506.8	508.9	513.3	516.5	521.9	521.9	523.1	525.2	526.3
7.5°	485.0	486.1	489.4	493.8	502.4	510.0	518.7	520.8	524.1	529.6	531.6
10°	473.1	475.3	479.6	485.0	494.8	504.6	515.3	518.7	528.5	538.2	543.7
12.5°	469.9	470.9	475.3	483.9	495.9	507.8	521.9	525.2	539.3	554.5	563.1
15°	475.3	476.4	478.5	488.3	502.4	517.6	536.0	540.4	557.8	575.1	585.9
17.5°	485.0	485.0	487.2	495.9	511.2	528.5	552.3	558.9	578.3	597.8	609.7
20°	491.5	491.5	494.8	503.4	520.8	543.7	571.9	580.5	602.2	624.0	634.8
22.5°	498.0	499.1	502.4	512.2	531.6	563.1	595.7	604.4	629.4	652.2	662.9
25°	516.5	515.3	516.5	525.2	547.9	587.0	628.2	639.1	665.2	690.1	695.6
27.5°	567.5	565.3	551.2	545.8	563.1	612.0	669.5	680.3	710.7	735.7	735.7
30°	684.7	680.3	645.6	601.2	587.0	634.8	708.5	723.8	762.8	784.5	778.0
32.5°	833.3	823.6	779.1	703.2	646.7	665.2	749.8	767.1	817.0	835.5	821.4
35°	996.1	995.1	939.7	842.1	761.7	728.1	802.9	823.6	886.5	902.8	880.0
37.5°	1168.6	1173.0	1136.1	1001.6	907.2	831.1	873.5	897.3	974.4	993.9	972.2
40°	1360.8	1359.6	1345.5	1186.0	1081.8	977.7	975.4	997.2	1090.5	1120.9	1090.5
42.5°	1603.8	1601.6	1550.6	1407.4	1293.4	1168.6	1124.2	1131.7	1235.9	1285.9	1241.3
45°	1851.2	1836.0	1777.4	1653.6	1552.8	1405.2	1320.5	1320.5	1409.6	1478.0	1408.5
47.5°	1988.9	1973.8	1950.0	1881.6	1851.2	1686.2	1561.5	1546.2	1615.7	1685.1	1587.5
50°	2170.2	2170.2	2110.5	2084.4	2136.6	2020.4	1827.3	1812.1	1845.7	1901.1	1773.1
52.5°	2313.4	2287.4	2245.1	2267.9	2416.5	2363.3	2093.2	2063.8	2089.9	2104.0	1934.8
55°	2373.1	2348.1	2344.9	2428.4	2658.5	2584.6	2365.5	2339.5	2337.3	2267.9	2075.8
57.5°	2385.0	2363.3	2404.6	2551.1	2894.0	2765.9	2636.8	2617.2	2556.4	2382.8	2220.1
60°	2284.1	2295.0	2394.8	2618.3	3032.8	2923.2	2865.8	2845.1	2705.2	2480.5	2380.6
62.5°	2076.9	2102.9	2289.5	2624.9	2981.8	2987.2	2992.7	2978.6	2820.2	2569.4	2542.4
65°	1831.6	1839.3	2063.8	2534.9	2892.8	2967.7	3086.0	3084.9	2908.1	2669.3	2724.7
67.5°	1509.4	1522.4	1716.6	2231.0	2714.9	2959.1	3208.6	3205.3	3007.9	2783.3	2833.2
70°	1123.0	1139.3	1296.7	1735.0	2317.7	2850.6	3369.2	3371.4	3113.2	2870.0	2758.2
71°	875.7	905.0	1069.8	1473.6	2114.8	2741.0	3384.5	3404.0	3125.1	2858.1	2604.2
72.5°	429.7	464.5	671.7	1037.3	1740.5	2495.7	3284.6	3322.6	3050.2	2709.5	2226.6
75°	111.8	118.3	200.7	424.3	933.2	1653.6	2648.7	2745.2	2493.6	2062.9	1360.8
77.5°	70.6	72.6	94.4	165.0	349.4	628.2	1556.1	1603.8	1424.7	1044.9	479.6
80°	49.9	51.1	59.6	106.3	204.0	183.3	560.0	580.5	515.3	276.7	85.8
82.5°	30.4	30.4	43.3	68.4	125.8	99.9	147.6	157.4	138.9	77.0	28.2
85°	17.4	18.5	27.1	46.7	59.6	48.8	55.2	58.6	59.6	51.1	11.9
87.5°	14.1	15.2	23.8	39.2	32.6	23.8	23.8	24.9	26.0	30.4	5.5
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°	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3
2.5°	524.1	524.1	525.2	524.1	524.1	524.1	525.2	525.2	525.2	527.4	528.5
5°	526.3	526.3	526.3	525.2	524.1	524.1	526.3	527.4	527.4	530.6	530.6
7.5°	531.6	531.6	529.6	527.4	525.2	521.9	523.1	524.1	523.1	524.1	524.1
10°	543.7	543.7	540.4	536.0	529.6	519.7	506.8	490.5	475.3	469.9	467.6
12.5°	563.1	562.0	555.6	547.9	533.8	500.2	451.4	393.9	346.2	333.1	328.8
15°	584.9	582.7	575.1	562.0	524.1	435.1	333.1	259.4	213.7	202.9	200.7
17.5°	607.7	604.4	593.5	567.5	479.6	323.4	214.8	162.8	137.7	135.6	136.7
20°	631.5	627.1	612.0	556.6	387.4	215.9	138.9	125.8	123.7	123.7	124.8
22.5°	658.7	653.3	632.6	517.6	282.1	143.2	119.3	118.3	117.2	116.2	116.2
25°	690.1	683.6	652.2	447.1	194.3	117.2	113.9	110.7	108.5	106.3	105.2
27.5°	728.1	719.4	667.3	360.2	133.6	109.6	107.4	102.0	97.7	93.3	93.3
30°	766.1	755.2	662.9	271.3	108.5	102.0	97.7	91.1	84.6	80.3	79.2
32.5°	806.3	795.4	634.8	182.3	98.8	93.3	87.9	78.1	70.6	65.1	64.0
35°	865.9	857.2	579.4	120.4	88.9	82.5	74.9	65.1	55.2	49.9	48.8
37.5°	954.9	944.0	511.2	92.3	78.1	68.4	61.8	51.1	41.2	35.8	34.8
40°	1074.2	1041.7	429.7	81.4	68.4	56.4	47.7	36.9	29.3	26.0	26.0
42.5°	1213.1	1136.1	341.8	73.8	60.7	46.7	34.8	24.9	20.6	19.5	19.5
45°	1360.8	1224.0	253.9	68.4	53.2	36.9	24.9	17.4	15.2	14.1	14.1
47.5°	1512.5	1295.6	176.9	61.8	44.5	28.2	17.4	13.0	10.8	9.8	9.8
50°	1654.7	1342.2	124.8	55.2	38.0	20.6	13.0	9.8	7.6	7.6	7.6
52.5°	1753.5	1337.9	90.0	47.7	29.3	14.1	8.6	6.5	6.5	6.5	6.5
55°	1840.4	1321.6	70.6	41.2	22.8	9.8	6.5	5.5	5.5	4.4	4.4
57.5°	1914.1	1295.6	59.6	33.7	16.3	7.6	4.4	4.4	3.3	3.3	3.3
60°	1977.0	1263.0	49.9	28.2	10.8	5.5	3.3	2.1	2.1	1.1	2.1
62.5°	2062.9	1242.4	43.3	21.8	7.6	3.3	2.1	1.1	1.1	0.0	0.0
65°	2125.7	1203.4	36.9	15.2	4.4	2.1	1.1	1.1	0.0	0.0	0.0
67.5°	2127.9	1132.8	27.1	8.6	3.3	2.1	1.1	0.0	0.0	0.0	0.0
70°	1956.4	965.8	17.4	4.4	2.1	1.1	1.1	0.0	0.0	0.0	0.0
71°	1799.1	855.1	14.1	3.3	2.1	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	1482.2	628.2	10.8	3.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
75°	817.0	228.0	5.5	2.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	261.4	69.5	3.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	44.5	10.8	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.2	4.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	1.1	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)