

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: P214656

Luminaire Tested: **ARCH-AF16-60-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214656
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
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-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5317.3 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G1

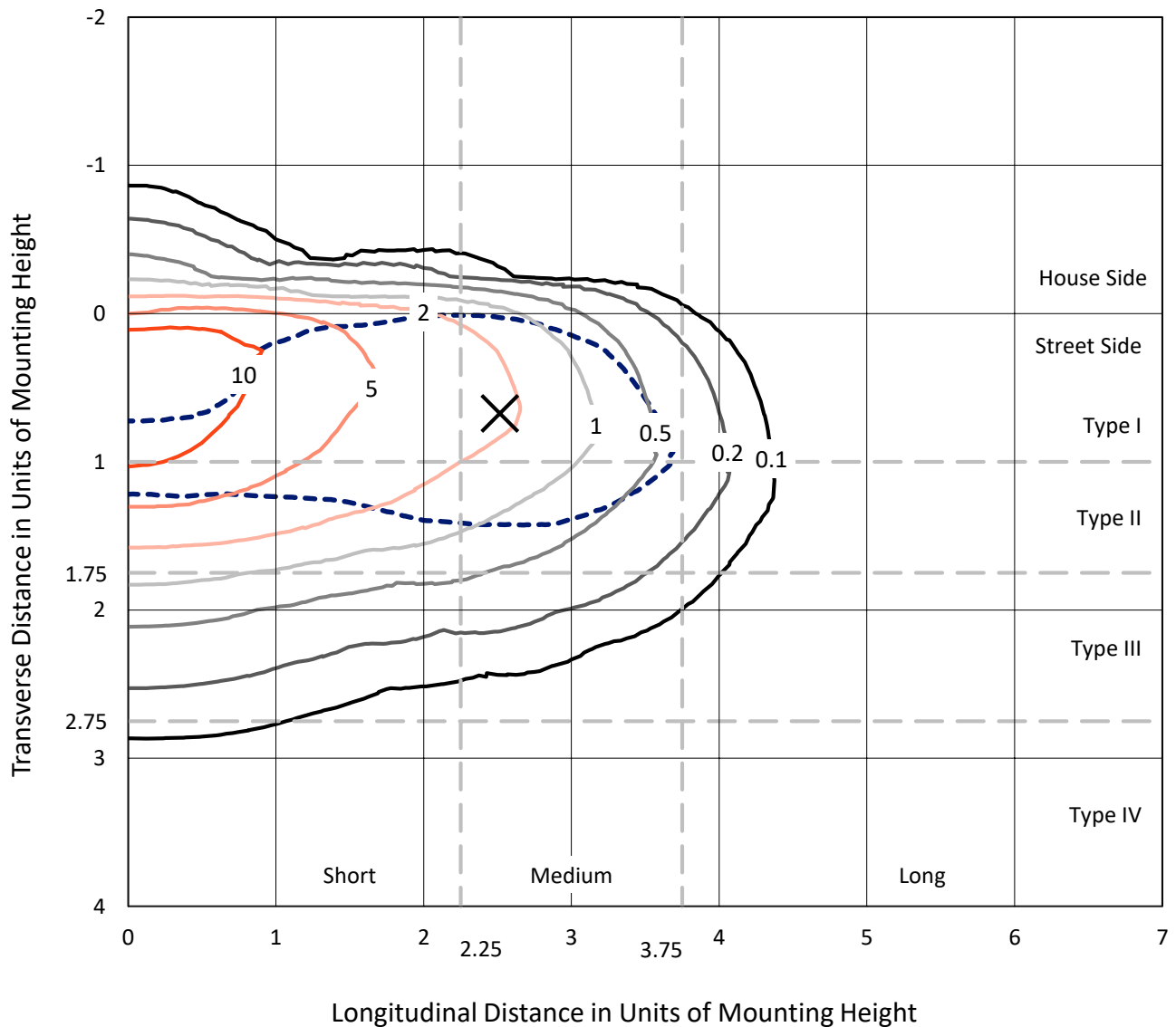
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

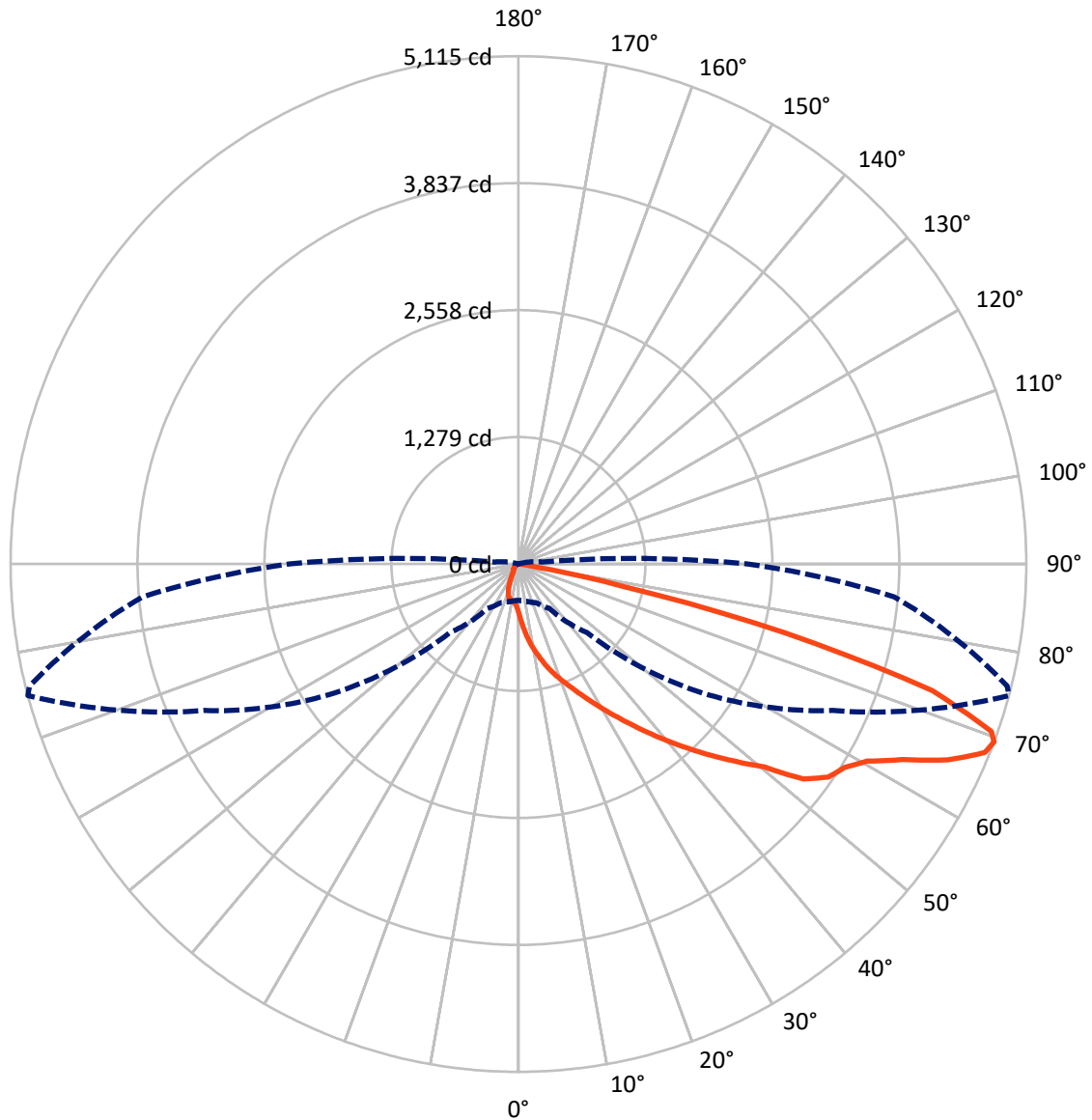
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.5 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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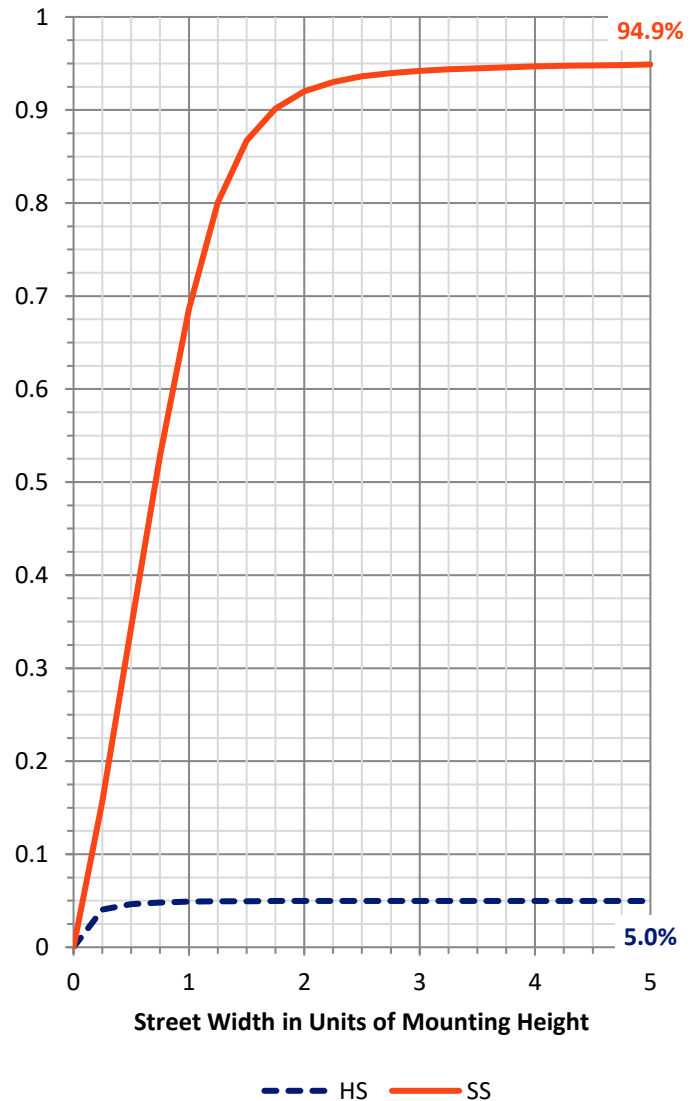
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	265.3	0.0	265.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	5052.0	0.0	5052.0
	% Fixture	95.0	0.0	95.0
Total	Lumens	5317.3	0.0	5317.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	1.1
10°-20°	206.3	3.9
20°-30°	393.8	7.4
30°-40°	706.3	13.3
40°-50°	1082.2	20.4
50°-60°	1257.7	23.7
60°-70°	1113.7	20.9
70°-80°	480.4	9.0
80°-90°	19.3	0.4
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°	5317.3	100.0
0°-180°	5317.3	100.0

Coefficient of Utilization



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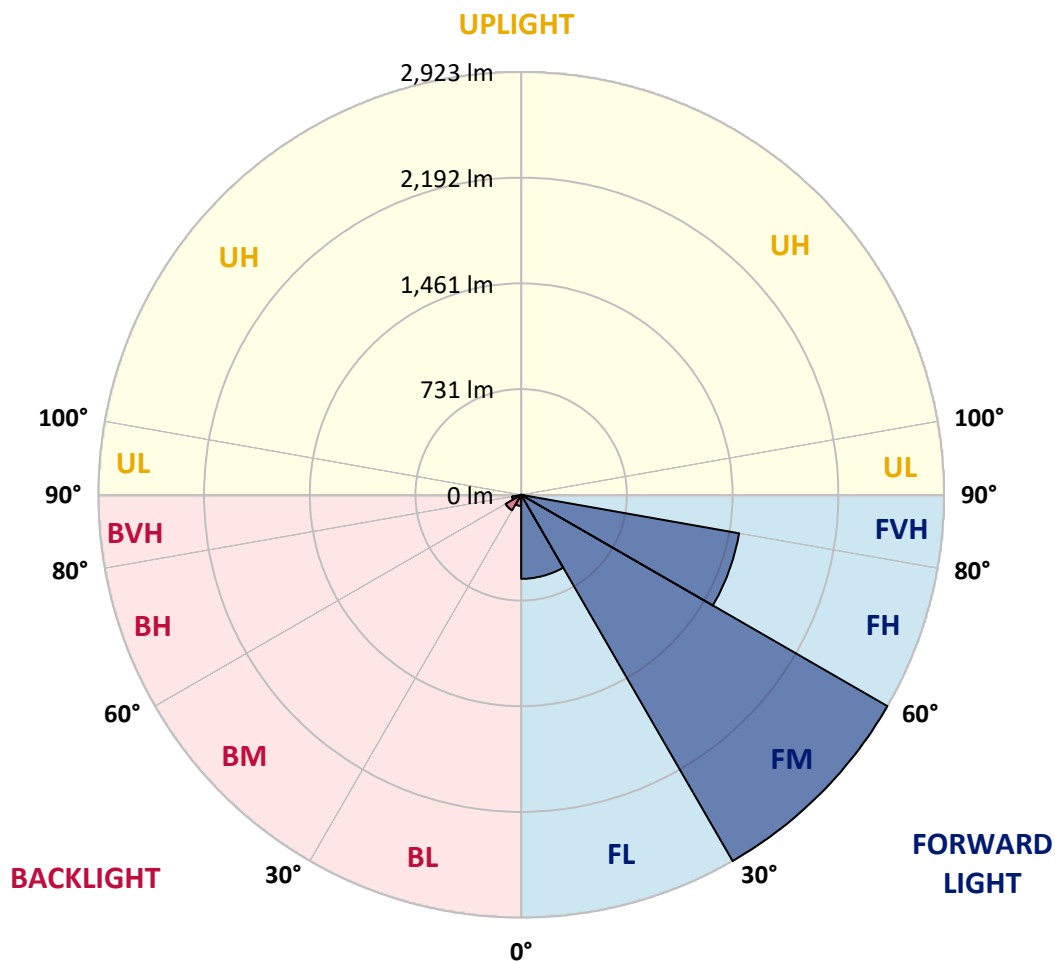
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	580.7	10.9			
FM	(30°-60°)	2922.5	55.0			
FH	(60°-80°)	1529.9	28.8			G1/1800
FVH	(80°-90°)	19.0	0.4			G1/100
BL	(0°-30°)	77.1	1.4	B0/110		
BM	(30°-60°)	123.7	2.3	B0/220		
BH	(60°-80°)	64.3	1.2	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: B0-U0-G1

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8
2.5°	815.1	807.0	799.0	789.8	769.2	733.6	688.8	640.6	580.8	570.5	522.3
5°	989.5	986.1	978.0	965.5	942.4	903.5	852.9	781.7	681.9	664.7	562.5
7.5°	1112.4	1110.1	1103.2	1088.3	1067.7	1028.6	975.8	898.9	782.9	763.4	613.1
10°	1222.6	1221.4	1215.7	1202.0	1181.3	1138.7	1082.5	1002.2	879.3	857.5	671.6
12.5°	1322.5	1323.6	1321.3	1314.4	1299.5	1259.4	1195.0	1107.8	972.3	948.2	741.5
15°	1381.0	1384.5	1393.7	1407.4	1412.0	1379.9	1313.3	1216.8	1067.7	1047.0	821.9
17.5°	1361.4	1364.9	1393.7	1440.7	1485.4	1490.0	1430.4	1320.1	1161.8	1141.1	901.1
20°	1314.4	1319.0	1348.9	1413.1	1500.4	1561.2	1537.1	1432.6	1251.3	1226.0	976.9
22.5°	1367.3	1367.3	1376.4	1415.5	1494.6	1590.0	1622.1	1545.2	1343.1	1312.1	1052.7
25°	1548.6	1545.2	1525.6	1509.6	1534.8	1619.7	1686.3	1659.9	1451.1	1415.5	1133.0
27.5°	1778.2	1794.3	1757.5	1699.0	1641.6	1678.4	1743.7	1773.6	1570.4	1533.7	1215.7
30°	2035.4	2042.2	1998.6	1920.6	1819.5	1783.9	1811.4	1871.2	1700.1	1659.9	1301.8
32.5°	2267.3	2261.5	2224.7	2143.3	2018.1	1941.3	1898.7	1949.2	1841.3	1795.4	1390.2
35°	2472.7	2477.3	2432.6	2338.4	2215.6	2134.1	2033.0	2037.6	1999.8	1947.0	1492.4
37.5°	2657.5	2649.5	2607.0	2512.9	2401.6	2313.2	2206.4	2129.5	2173.1	2118.0	1607.2
40°	2807.9	2799.9	2755.1	2663.3	2558.8	2486.5	2402.7	2252.3	2355.7	2292.5	1730.0
42.5°	2927.3	2918.2	2880.2	2791.8	2690.9	2626.5	2586.3	2403.8	2550.7	2487.6	1867.7
45°	2985.9	2977.8	2954.9	2888.3	2799.9	2743.7	2763.2	2578.3	2759.7	2706.9	2019.3
47.5°	2916.9	2913.6	2940.0	2928.5	2878.0	2848.1	2915.8	2768.9	2978.9	2927.3	2193.7
50°	2708.1	2713.8	2790.7	2885.9	2910.1	2945.7	3040.9	2969.8	3214.3	3159.2	2394.6
52.5°	2192.6	2231.7	2463.6	2693.1	2871.0	3005.3	3187.9	3256.8	3597.7	3543.8	2708.1
55°	1637.0	1653.1	1905.7	2298.3	2713.8	3000.8	3297.0	3425.6	3787.2	3732.0	2790.7
57.5°	1298.3	1304.1	1429.2	1829.9	2390.0	2897.5	3354.4	3486.3	3869.8	3823.9	2913.6
60°	1019.4	1026.3	1117.0	1392.4	1934.3	2618.5	3271.7	3539.2	4031.7	3994.9	3128.2
62.5°	793.2	800.2	855.2	1017.1	1451.1	2189.2	3105.3	3624.1	4339.3	4322.1	3479.5
65°	614.2	616.4	654.4	730.1	1025.1	1724.3	2902.0	3703.3	4754.9	4739.9	3764.2
67.5°	453.5	456.8	483.2	530.4	692.2	1238.7	2569.1	3642.5	5068.3	5024.6	3867.5
69°	366.2	369.7	392.6	430.5	546.5	975.8	2264.9	3492.1	5115.4	5074.0	3802.1
70°	313.4	315.7	338.7	370.8	466.1	828.8	2023.9	3362.3	5053.4	5013.2	3652.9
72.5°	200.9	212.4	235.4	256.0	308.8	548.7	1366.0	2788.4	4359.9	4291.1	2860.7
75°	111.4	114.8	156.1	181.4	205.5	357.0	760.0	1739.1	2773.5	2725.2	1530.2
77.5°	91.9	94.1	110.2	137.8	137.8	199.8	287.0	685.4	1055.0	951.7	414.4
80°	64.2	66.6	83.8	90.7	98.7	112.5	93.0	150.4	163.1	144.6	62.0
82.5°	44.8	47.1	57.4	74.6	79.2	52.8	34.5	44.8	47.1	47.1	24.1
85°	8.1	11.5	42.5	62.0	47.1	16.1	19.5	16.1	14.9	16.1	5.7
87.5°	0.0	0.0	26.4	29.9	25.3	6.9	8.1	5.7	3.5	4.6	2.3
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°	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8	494.8
2.5°	498.2	474.1	432.8	402.9	377.7	358.1	350.2	337.5	328.4	332.9	327.1
5°	512.0	469.5	402.9	360.5	330.6	305.4	284.7	268.6	256.0	253.7	251.4
7.5°	533.8	472.9	385.8	332.9	288.2	249.1	217.0	192.8	174.5	174.5	167.6
10°	563.6	482.1	375.4	305.4	238.8	186.0	153.9	130.8	121.7	120.5	118.3
12.5°	605.0	499.4	367.3	269.8	186.0	135.4	115.9	107.9	104.4	103.3	102.2
15°	661.2	524.6	358.1	226.2	141.2	111.4	103.3	96.5	93.0	91.9	90.7
17.5°	715.1	547.6	338.7	181.4	114.8	101.1	91.9	86.1	81.5	80.4	80.4
20°	765.7	567.1	305.4	141.2	103.3	90.7	81.5	74.6	70.1	68.8	68.8
22.5°	818.5	583.2	264.0	114.8	94.1	80.4	71.2	64.2	59.7	58.5	57.4
25°	874.7	594.6	217.0	102.2	84.9	71.2	60.9	55.1	51.7	50.5	49.4
27.5°	935.6	599.2	172.2	93.0	74.6	62.0	52.8	47.1	44.8	43.6	43.6
30°	990.7	594.6	133.2	82.7	65.5	53.9	45.9	41.3	39.1	37.8	37.8
32.5°	1048.1	583.2	106.8	73.4	57.4	45.9	39.1	35.6	34.5	33.2	33.2
35°	1109.0	568.2	91.9	65.5	49.4	40.2	34.5	32.1	31.0	29.9	29.9
37.5°	1180.1	549.8	83.8	58.5	43.6	35.6	29.9	28.7	27.5	27.5	27.5
40°	1260.5	526.9	78.1	52.8	39.1	31.0	26.4	25.3	24.1	24.1	24.1
42.5°	1345.4	500.5	72.3	47.1	34.5	26.4	22.9	22.9	21.8	21.8	20.7
45°	1440.7	474.1	66.6	41.3	29.9	22.9	19.5	18.4	18.4	17.2	17.2
47.5°	1553.1	450.0	60.9	36.7	26.4	19.5	17.2	16.1	14.9	13.8	13.8
50°	1711.6	447.7	53.9	32.1	24.1	16.1	13.8	12.6	11.5	10.3	10.3
52.5°	1868.9	427.1	45.9	26.4	19.5	13.8	10.3	9.2	8.1	8.1	6.9
55°	1904.4	392.6	40.2	22.9	14.9	10.3	8.1	5.7	5.7	4.6	4.6
57.5°	1982.6	376.5	34.5	18.4	11.5	8.1	4.6	3.5	3.5	3.5	3.5
60°	2136.3	371.9	29.9	16.1	8.1	5.7	3.5	2.3	2.3	1.1	1.1
62.5°	2348.7	367.3	25.3	13.8	5.7	3.5	2.3	1.1	0.0	0.0	0.0
65°	2465.8	336.3	20.7	10.3	4.6	3.5	1.1	0.0	0.0	0.0	0.0
67.5°	2434.8	277.8	18.4	6.9	3.5	2.3	1.1	0.0	0.0	0.0	0.0
69°	2305.1	234.2	14.9	5.7	3.5	2.3	1.1	0.0	0.0	0.0	0.0
70°	2149.0	202.0	13.8	4.6	2.3	1.1	1.1	0.0	0.0	0.0	0.0
72.5°	1525.6	105.6	9.2	3.5	2.3	1.1	0.0	0.0	0.0	0.0	0.0
75°	712.9	47.1	5.7	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	157.2	21.8	3.5	2.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	29.9	8.1	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.3	3.5	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	0.0	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)