

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: P214799

Luminaire Tested: **ARCH-AF24-40-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214799
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-AF24-40-D-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 500mA 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: 3768.5 lumens
Efficiency: N/A
Efficacy: 94.2 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 - G1

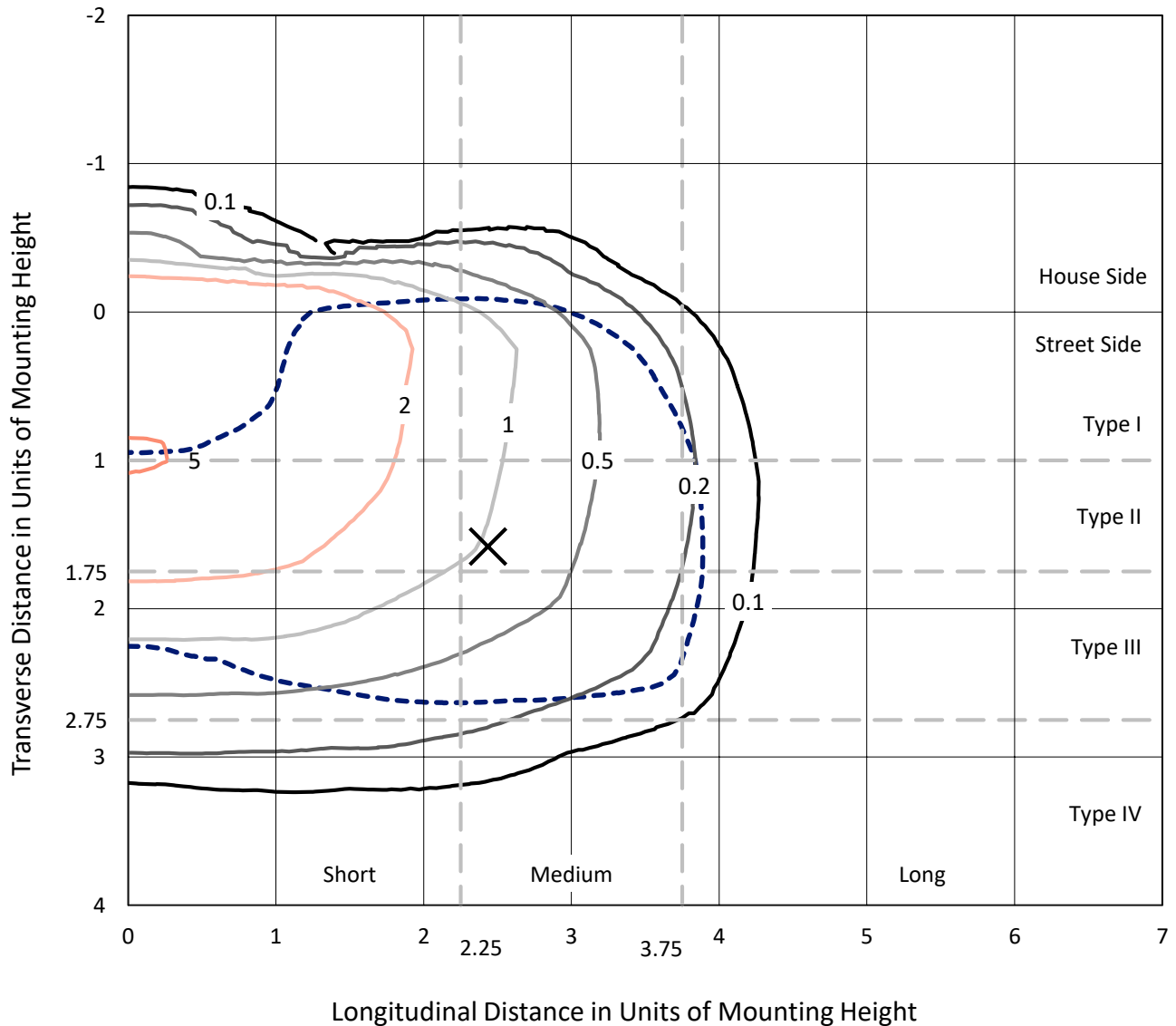
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

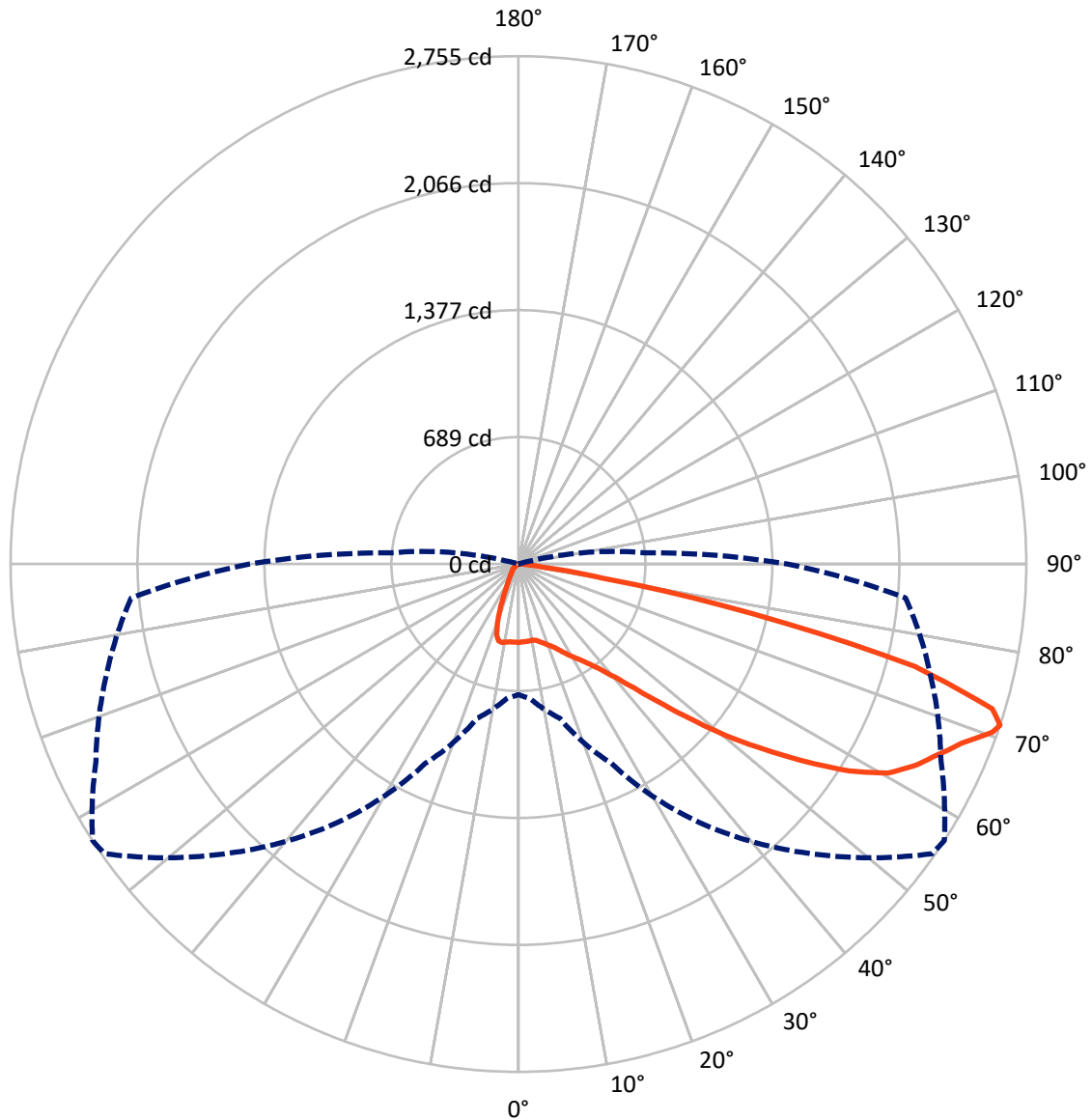


Based on 10 foot mounting height. Maximum calculated value = 5.3 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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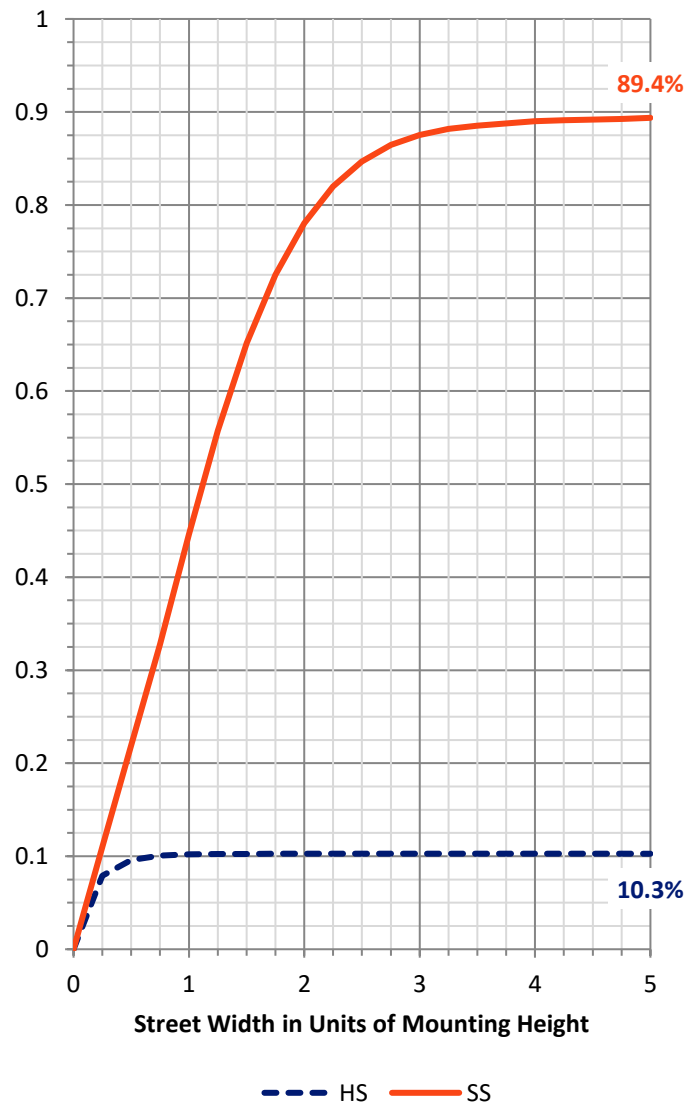
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	390.5	0.0	390.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	3378.0	0.0	3378.0
	% Fixture	89.6	0.0	89.6
Total	Lumens	3768.5	0.0	3768.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.0	1.1
10°-20°	106.9	2.8
20°-30°	166.8	4.4
30°-40°	282.0	7.5
40°-50°	547.7	14.5
50°-60°	919.7	24.4
60°-70°	1097.6	29.1
70°-80°	578.4	15.3
80°-90°	29.4	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°	3768.5	100.0
0°-180°	3768.5	100.0

Coefficient of Utilization



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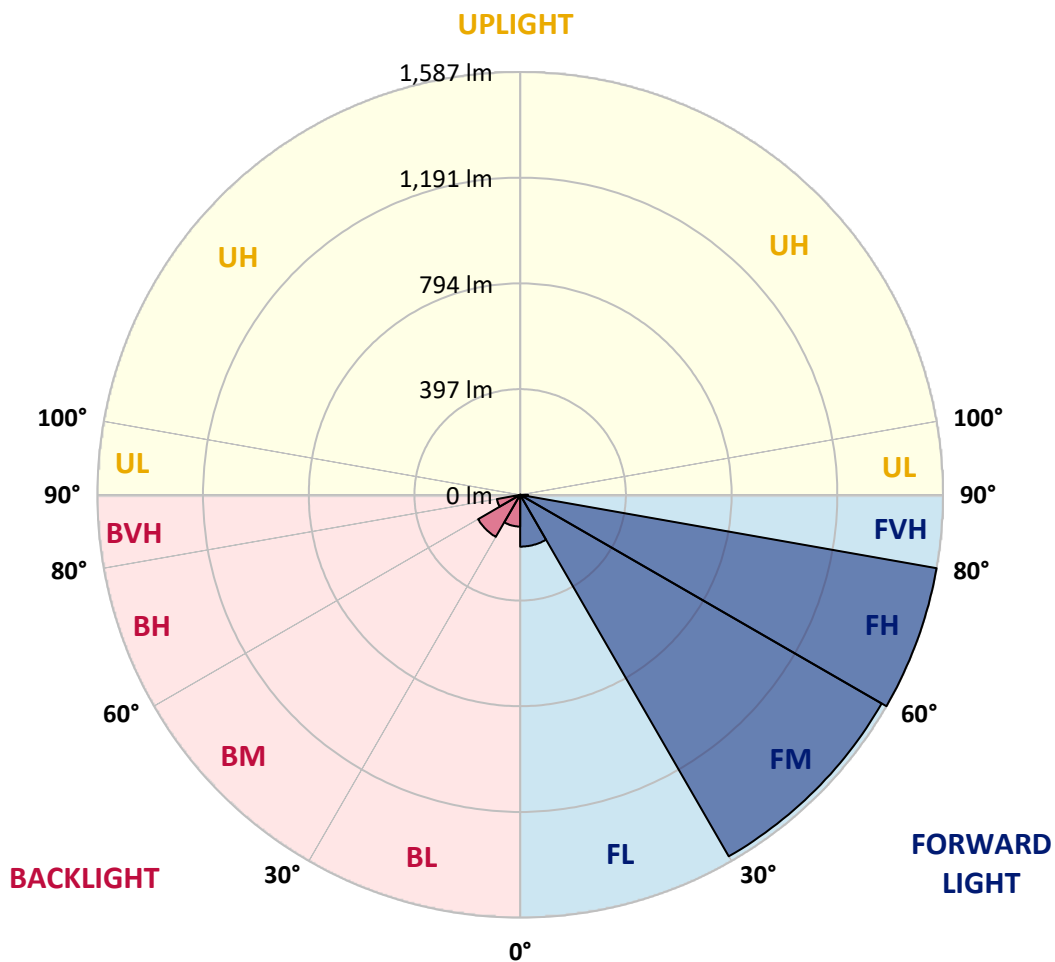
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	194.6	5.2			
FM	(30°-60°)	1567.0	41.6			
FH	(60°-80°)	1587.3	42.1			G1/1800
FVH	(80°-90°)	29.1	0.8			G1/100
BL	(0°-30°)	119.2	3.2	B1/500		
BM	(30°-60°)	182.4	4.8	B0/220		
BH	(60°-80°)	88.7	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-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9
2.5°	419.7	419.7	419.7	420.6	421.6	421.6	423.3	422.4	422.4	422.4	424.1
5°	408.4	409.2	410.1	411.8	415.3	418.0	422.4	422.4	423.3	425.0	425.9
7.5°	392.5	393.4	396.1	399.6	406.6	412.8	419.7	421.6	424.1	428.5	430.3
10°	382.9	384.6	388.1	392.5	400.5	408.4	417.2	419.7	427.7	435.6	440.0
12.5°	380.2	381.2	384.6	391.7	401.3	411.0	422.4	425.0	436.4	448.8	455.7
15°	384.6	385.6	387.3	395.2	406.6	418.9	433.8	437.3	451.3	465.4	474.2
17.5°	392.5	392.5	394.2	401.3	413.6	427.7	447.0	452.2	468.1	483.9	493.5
20°	397.8	397.8	400.5	407.4	421.6	440.0	462.8	469.8	487.3	504.9	513.7
22.5°	403.0	404.0	406.6	414.5	430.3	455.7	482.1	489.2	509.3	527.7	536.5
25°	418.0	417.2	418.0	425.0	443.4	475.1	508.4	517.2	538.3	558.5	562.9
27.5°	459.3	457.6	446.1	441.7	455.7	495.3	541.9	550.6	575.2	595.4	595.4
30°	554.1	550.6	522.5	486.5	475.1	513.7	573.5	585.7	617.4	634.9	629.6
32.5°	674.4	666.6	630.5	569.1	523.3	538.3	606.8	620.8	661.2	676.2	664.7
35°	806.2	805.3	760.5	681.5	616.4	589.2	649.9	666.6	717.5	730.6	712.2
37.5°	945.7	949.3	919.4	810.5	734.2	672.7	707.0	726.2	788.6	804.3	786.9
40°	1101.2	1100.3	1088.9	959.8	875.5	791.3	789.4	807.0	882.5	907.2	882.5
42.5°	1297.9	1296.2	1254.9	1139.0	1046.8	945.7	909.8	916.0	1000.2	1040.6	1004.6
45°	1498.1	1485.8	1438.4	1338.3	1256.6	1137.2	1068.7	1068.7	1140.7	1196.0	1139.9
47.5°	1609.6	1597.3	1578.0	1522.8	1498.1	1364.6	1263.7	1251.4	1307.5	1363.8	1284.7
50°	1756.3	1756.3	1708.0	1686.9	1729.1	1635.1	1478.8	1466.5	1493.7	1538.5	1434.9
52.5°	1872.2	1851.1	1816.9	1835.4	1955.7	1912.6	1693.9	1670.3	1691.3	1702.7	1565.7
55°	1920.5	1900.3	1897.7	1965.3	2151.5	2091.7	1914.4	1893.3	1891.5	1835.4	1679.9
57.5°	1930.2	1912.6	1946.0	2064.5	2342.0	2238.4	2133.9	2118.1	2068.9	1928.5	1796.7
60°	1848.5	1857.3	1938.1	2118.9	2454.5	2365.8	2319.2	2302.6	2189.2	2007.4	1926.6
62.5°	1680.8	1701.9	1852.9	2124.3	2413.1	2417.5	2421.9	2410.5	2282.3	2079.5	2057.5
65°	1482.4	1488.5	1670.3	2051.3	2341.1	2401.8	2497.4	2496.6	2353.4	2160.3	2205.1
67.5°	1221.5	1232.0	1389.3	1805.5	2197.1	2394.7	2596.7	2594.1	2434.2	2252.4	2292.8
70°	908.9	922.1	1049.3	1404.2	1875.7	2306.9	2726.7	2728.4	2519.4	2322.7	2232.3
71°	708.7	732.3	865.8	1192.6	1711.5	2218.2	2739.0	2754.8	2529.0	2313.1	2107.6
72.5°	347.7	375.8	543.6	839.5	1408.6	2019.7	2658.1	2688.9	2468.5	2192.7	1801.9
75°	90.4	95.7	162.4	343.4	755.2	1338.3	2143.6	2221.7	2018.0	1669.4	1101.2
77.5°	57.1	58.8	76.4	133.5	282.7	508.4	1259.3	1297.9	1153.0	845.7	388.1
80°	40.4	41.2	48.3	86.0	165.1	148.4	453.2	469.8	417.2	223.9	69.4
82.5°	24.6	24.6	35.1	55.3	101.9	80.8	119.4	127.4	112.4	62.3	22.8
85°	14.0	14.9	22.0	37.7	48.3	39.5	44.8	47.5	48.3	41.2	9.6
87.5°	11.5	12.3	19.3	31.6	26.4	19.3	19.3	20.2	21.1	24.6	4.4
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°	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9	425.9
2.5°	424.1	424.1	425.0	424.1	424.1	424.1	425.0	425.0	425.0	426.8	427.7
5°	425.9	425.9	425.9	425.0	424.1	424.1	425.9	426.8	426.8	429.4	429.4
7.5°	430.3	430.3	428.5	426.8	425.0	422.4	423.3	424.1	423.3	424.1	424.1
10°	440.0	440.0	437.3	433.8	428.5	420.6	410.1	396.9	384.6	380.2	378.5
12.5°	455.7	454.9	449.6	443.4	432.1	404.8	365.3	318.8	280.1	269.5	266.1
15°	473.3	471.6	465.4	454.9	424.1	352.1	269.5	209.9	173.0	164.2	162.4
17.5°	491.7	489.2	480.4	459.3	388.1	261.7	173.9	131.8	111.5	109.8	110.7
20°	511.1	507.6	495.3	450.5	313.5	174.7	112.4	101.9	100.1	100.1	101.0
22.5°	533.1	528.7	512.0	418.9	228.3	115.9	96.6	95.7	94.8	94.0	94.0
25°	558.5	553.2	527.7	361.8	157.2	94.8	92.2	89.6	87.8	86.0	85.2
27.5°	589.2	582.3	540.0	291.5	108.0	88.7	87.0	82.6	79.1	75.5	75.5
30°	620.0	611.2	536.5	219.5	87.8	82.6	79.1	73.8	68.5	65.0	64.1
32.5°	652.4	643.6	513.7	147.5	79.9	75.5	71.1	63.2	57.1	52.7	51.8
35°	700.7	693.8	468.9	97.5	72.0	66.7	60.6	52.7	44.8	40.4	39.5
37.5°	772.7	764.0	413.6	74.7	63.2	55.3	50.0	41.2	33.3	28.9	28.1
40°	869.4	843.0	347.7	65.9	55.3	45.6	38.7	29.9	23.7	21.1	21.1
42.5°	981.7	919.4	276.6	59.7	49.2	37.7	28.1	20.2	16.7	15.9	15.9
45°	1101.2	990.5	205.5	55.3	43.1	29.9	20.2	14.0	12.3	11.5	11.5
47.5°	1224.2	1048.5	143.1	50.0	36.0	22.8	14.0	10.5	8.8	7.9	7.9
50°	1339.1	1086.3	101.0	44.8	30.7	16.7	10.5	7.9	6.1	6.1	6.1
52.5°	1419.1	1082.8	72.9	38.7	23.7	11.5	7.1	5.3	5.3	5.3	5.3
55°	1489.3	1069.6	57.1	33.3	18.4	7.9	5.3	4.4	4.4	3.5	3.5
57.5°	1549.1	1048.5	48.3	27.2	13.2	6.1	3.5	3.5	2.7	2.7	2.7
60°	1600.0	1022.1	40.4	22.8	8.8	4.4	2.7	1.7	1.7	0.9	1.7
62.5°	1669.4	1005.5	35.1	17.6	6.1	2.7	1.7	0.9	0.9	0.0	0.0
65°	1720.3	973.8	29.9	12.3	3.5	1.7	0.9	0.9	0.0	0.0	0.0
67.5°	1722.0	916.8	22.0	7.1	2.7	1.7	0.9	0.0	0.0	0.0	0.0
70°	1583.3	781.5	14.0	3.5	1.7	0.9	0.9	0.0	0.0	0.0	0.0
71°	1456.0	692.0	11.5	2.7	1.7	0.9	0.0	0.0	0.0	0.0	0.0
72.5°	1199.5	508.4	8.8	2.7	0.9	0.9	0.0	0.0	0.0	0.0	0.0
75°	661.2	184.4	4.4	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	211.6	56.2	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	36.0	8.8	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	12.3	3.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.5	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	0.9	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)