

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: P214644

Luminaire Tested: **ARCH-AF24-30-D-U-T2R-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214644
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-AF24-30-D-U-T2R-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2730 lumens
Efficiency: N/A
Efficacy: 88.1 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): 31
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

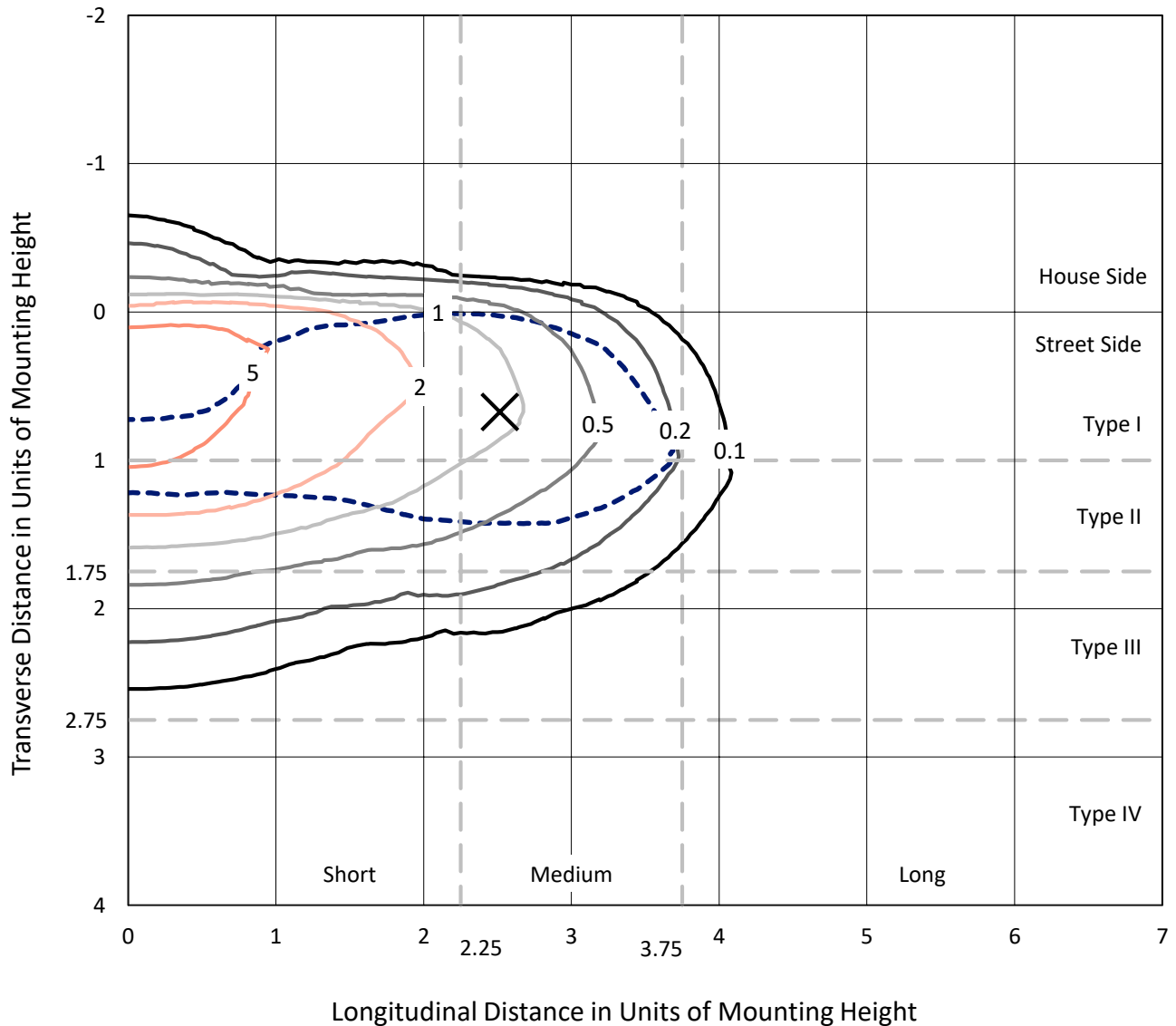


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

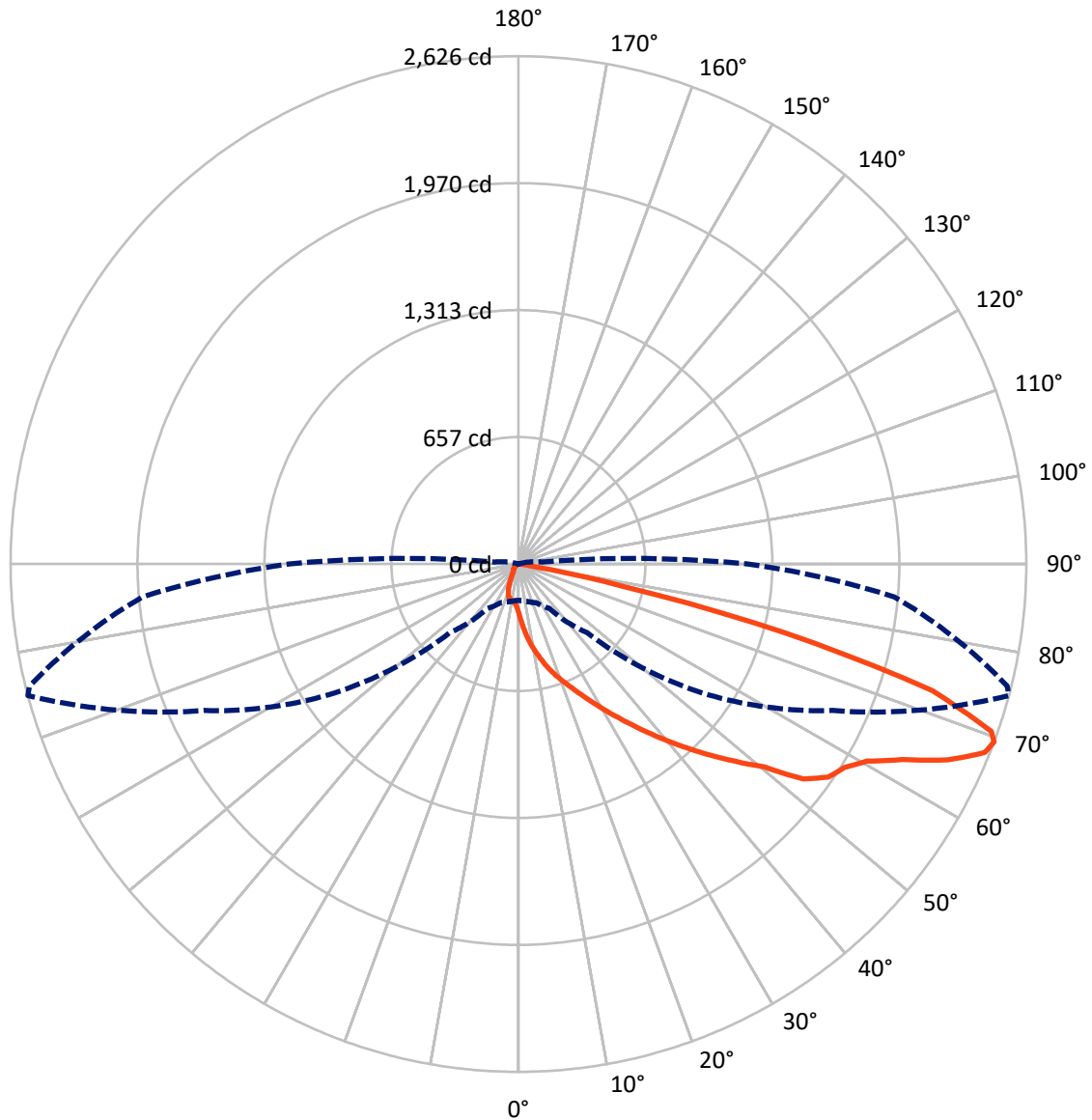


Based on 10 foot mounting height. Maximum calculated value = 7 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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

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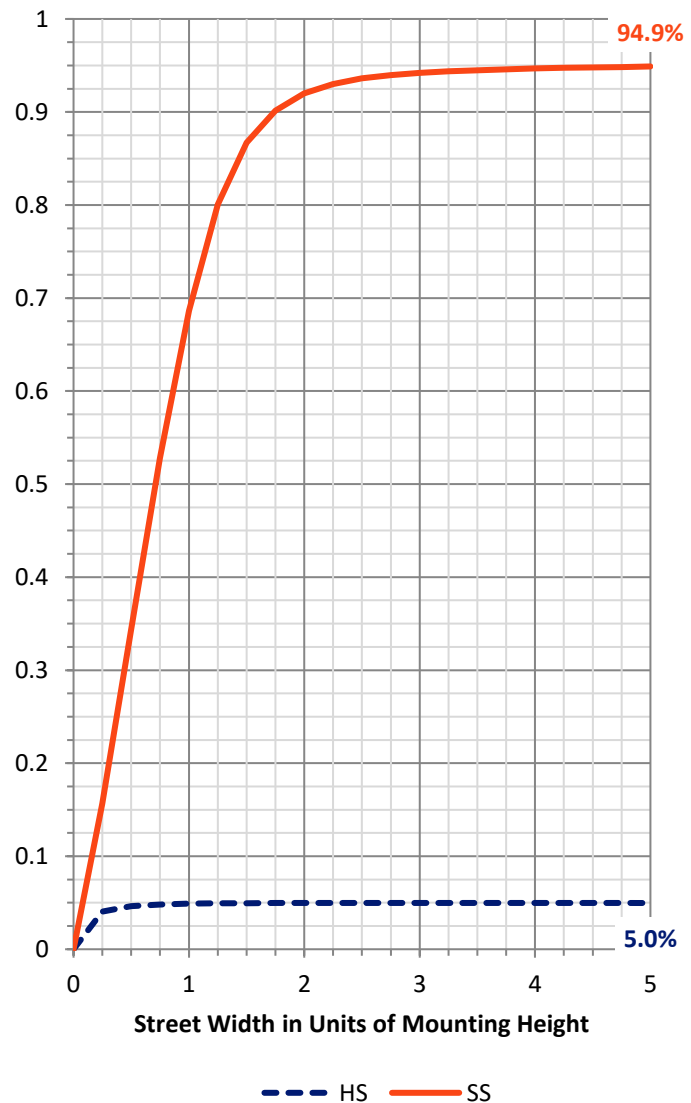
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	136.2	0.0	136.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	2593.8	0.0	2593.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	2730.0	0.0	2730.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.6	1.1
10°-20°	105.9	3.9
20°-30°	202.2	7.4
30°-40°	362.6	13.3
40°-50°	555.6	20.4
50°-60°	645.7	23.7
60°-70°	571.8	20.9
70°-80°	246.6	9.0
80°-90°	9.9	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°	2730.0	100.0
0°-180°	2730.0	100.0

Coefficient of Utilization



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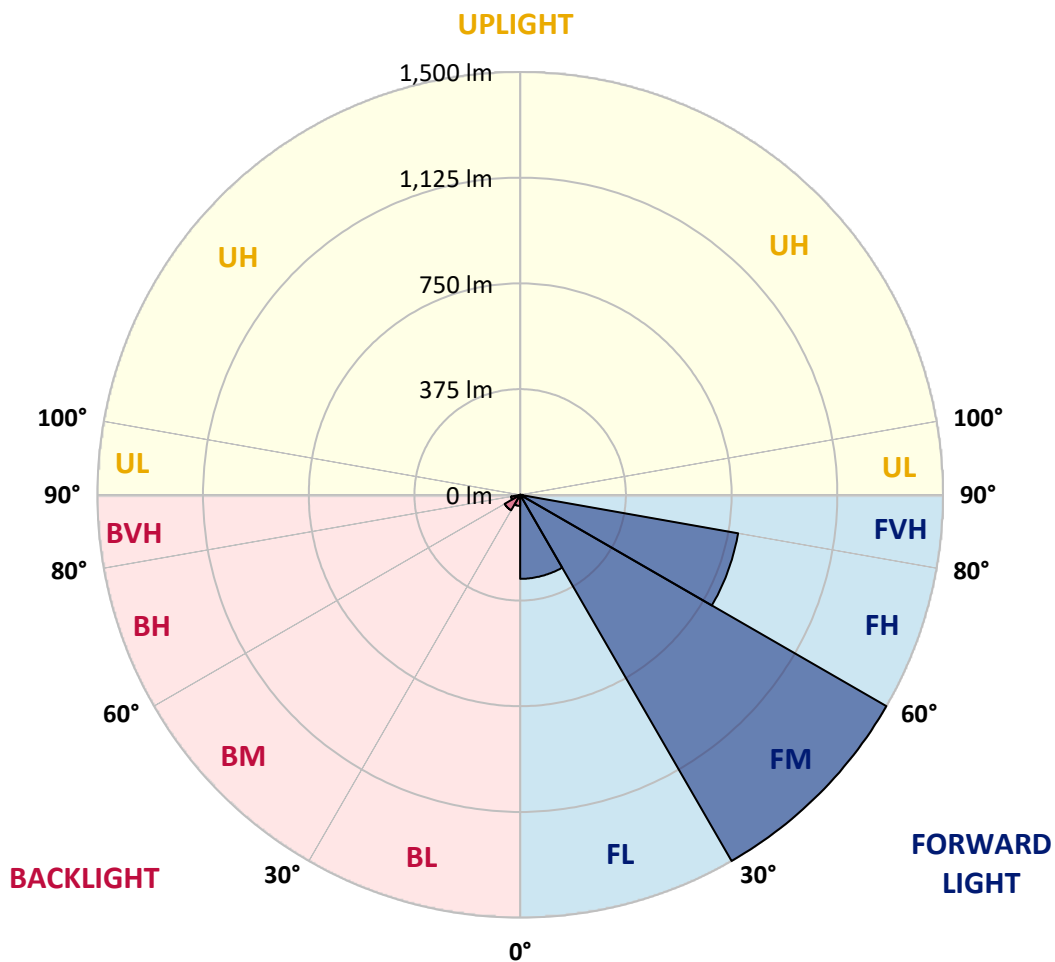
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	298.1	10.9			
FM	(30°-60°)	1500.5	55.0			
FH	(60°-80°)	785.5	28.8			G1/1800
FVH	(80°-90°)	9.7	0.4			G0/10
BL	(0°-30°)	39.6	1.4	B0/110		
BM	(30°-60°)	63.5	2.3	B0/220		
BH	(60°-80°)	33.0	1.2	B0/110		G0/110
BVH	(80°-90°)	0.1	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°	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0
2.5°	418.5	414.3	410.2	405.5	394.9	376.6	353.6	328.9	298.2	292.9	268.2
5°	508.1	506.3	502.2	495.7	483.9	463.8	437.9	401.4	350.1	341.3	288.8
7.5°	571.1	569.9	566.4	558.7	548.1	528.1	501.0	461.5	402.0	391.9	314.7
10°	627.7	627.1	624.2	617.1	606.5	584.7	555.8	514.5	451.5	440.3	344.8
12.5°	679.0	679.6	678.4	674.8	667.2	646.6	613.6	568.8	499.2	486.8	380.7
15°	709.0	710.8	715.5	722.6	724.9	708.4	674.3	624.7	548.1	537.5	422.0
17.5°	699.0	700.8	715.5	739.7	762.7	765.0	734.4	677.8	596.5	585.8	462.7
20°	674.8	677.2	692.5	725.5	770.3	801.6	789.2	735.6	642.4	629.5	501.6
22.5°	702.0	702.0	706.7	726.7	767.4	816.3	832.8	793.3	689.6	673.7	540.5
25°	795.1	793.3	783.3	775.0	788.0	831.6	865.8	852.3	745.0	726.7	581.7
27.5°	913.0	921.2	902.4	872.3	842.8	861.7	895.3	910.6	806.3	787.4	624.2
30°	1045.0	1048.5	1026.1	986.0	934.2	915.9	930.1	960.7	872.9	852.3	668.4
32.5°	1164.0	1161.1	1142.2	1100.4	1036.1	996.7	974.8	1000.8	945.4	921.8	713.7
35°	1269.5	1271.9	1248.9	1200.6	1137.5	1095.7	1043.8	1046.2	1026.7	999.6	766.2
37.5°	1364.4	1360.3	1338.5	1290.2	1233.0	1187.6	1132.8	1093.3	1115.7	1087.4	825.1
40°	1441.6	1437.5	1414.5	1367.4	1313.7	1276.6	1233.6	1156.4	1209.4	1177.0	888.2
42.5°	1502.9	1498.2	1478.8	1433.4	1381.5	1348.5	1327.9	1234.2	1309.6	1277.2	958.9
45°	1533.0	1528.9	1517.1	1482.9	1437.5	1408.6	1418.7	1323.8	1416.9	1389.8	1036.7
47.5°	1497.6	1495.9	1509.4	1503.5	1477.6	1462.3	1497.0	1421.6	1529.5	1502.9	1126.3
50°	1390.4	1393.3	1432.8	1481.7	1494.1	1512.4	1561.3	1524.7	1650.3	1622.0	1229.5
52.5°	1125.7	1145.8	1264.8	1382.7	1474.1	1543.0	1636.7	1672.1	1847.1	1819.4	1390.4
55°	840.5	848.7	978.4	1180.0	1393.3	1540.7	1692.7	1758.7	1944.4	1916.1	1432.8
57.5°	666.6	669.5	733.8	939.5	1227.1	1487.6	1722.2	1790.0	1986.8	1963.2	1495.9
60°	523.4	526.9	573.5	714.9	993.1	1344.4	1679.8	1817.1	2069.9	2051.1	1606.1
62.5°	407.3	410.8	439.1	522.2	745.0	1124.0	1594.3	1860.7	2227.9	2219.0	1786.4
65°	315.3	316.5	336.0	374.8	526.3	885.3	1490.0	1901.4	2441.2	2433.6	1932.6
67.5°	232.8	234.6	248.1	272.3	355.4	635.9	1319.0	1870.1	2602.1	2579.7	1985.6
69°	188.0	189.8	201.6	221.0	280.5	501.0	1162.9	1792.9	2626.3	2605.1	1952.0
70°	160.9	162.1	173.9	190.4	239.3	425.5	1039.1	1726.3	2594.5	2573.8	1875.4
72.5°	103.1	109.0	120.8	131.4	158.5	281.7	701.4	1431.6	2238.5	2203.1	1468.8
75°	57.2	58.9	80.2	93.1	105.5	183.3	390.2	892.9	1424.0	1399.2	785.7
77.5°	47.2	48.3	56.6	70.7	70.7	102.6	147.3	351.9	541.6	488.6	212.8
80°	33.0	34.2	43.0	46.6	50.7	57.8	47.7	77.2	83.7	74.3	31.8
82.5°	23.0	24.2	29.5	38.3	40.7	27.1	17.7	23.0	24.2	24.2	12.4
85°	4.1	5.9	21.8	31.8	24.2	8.3	10.0	8.3	7.7	8.3	2.9
87.5°	0.0	0.0	13.6	15.3	13.0	3.5	4.1	2.9	1.8	2.4	1.2
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°	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0
2.5°	255.8	243.4	222.2	206.9	193.9	183.9	179.8	173.3	168.6	170.9	168.0
5°	262.9	241.1	206.9	185.1	169.7	156.8	146.2	137.9	131.4	130.3	129.1
7.5°	274.1	242.8	198.0	170.9	147.9	127.9	111.4	99.0	89.6	89.6	86.1
10°	289.4	247.5	192.7	156.8	122.6	95.5	79.0	67.2	62.5	61.9	60.7
12.5°	310.6	256.4	188.6	138.5	95.5	69.5	59.5	55.4	53.6	53.0	52.5
15°	339.5	269.3	183.9	116.1	72.5	57.2	53.0	49.5	47.7	47.2	46.6
17.5°	367.2	281.1	173.9	93.1	58.9	51.9	47.2	44.2	41.8	41.3	41.3
20°	393.1	291.2	156.8	72.5	53.0	46.6	41.8	38.3	36.0	35.4	35.4
22.5°	420.2	299.4	135.6	58.9	48.3	41.3	36.5	33.0	30.6	30.1	29.5
25°	449.1	305.3	111.4	52.5	43.6	36.5	31.2	28.3	26.5	25.9	25.3
27.5°	480.3	307.7	88.4	47.7	38.3	31.8	27.1	24.2	23.0	22.4	22.4
30°	508.6	305.3	68.4	42.4	33.6	27.7	23.6	21.2	20.0	19.4	19.4
32.5°	538.1	299.4	54.8	37.7	29.5	23.6	20.0	18.3	17.7	17.1	17.1
35°	569.3	291.7	47.2	33.6	25.3	20.6	17.7	16.5	15.9	15.3	15.3
37.5°	605.9	282.3	43.0	30.1	22.4	18.3	15.3	14.7	14.1	14.1	14.1
40°	647.1	270.5	40.1	27.1	20.0	15.9	13.6	13.0	12.4	12.4	12.4
42.5°	690.8	257.0	37.1	24.2	17.7	13.6	11.8	11.8	11.2	11.2	10.6
45°	739.7	243.4	34.2	21.2	15.3	11.8	10.0	9.4	9.4	8.8	8.8
47.5°	797.4	231.0	31.2	18.9	13.6	10.0	8.8	8.3	7.7	7.1	7.1
50°	878.8	229.9	27.7	16.5	12.4	8.3	7.1	6.5	5.9	5.3	5.3
52.5°	959.5	219.3	23.6	13.6	10.0	7.1	5.3	4.7	4.1	4.1	3.5
55°	977.8	201.6	20.6	11.8	7.7	5.3	4.1	2.9	2.9	2.4	2.4
57.5°	1017.9	193.3	17.7	9.4	5.9	4.1	2.4	1.8	1.8	1.8	1.8
60°	1096.8	191.0	15.3	8.3	4.1	2.9	1.8	1.2	1.2	0.6	0.6
62.5°	1205.9	188.6	13.0	7.1	2.9	1.8	1.2	0.6	0.0	0.0	0.0
65°	1266.0	172.7	10.6	5.3	2.4	1.8	0.6	0.0	0.0	0.0	0.0
67.5°	1250.1	142.6	9.4	3.5	1.8	1.2	0.6	0.0	0.0	0.0	0.0
69°	1183.5	120.2	7.7	2.9	1.8	1.2	0.6	0.0	0.0	0.0	0.0
70°	1103.3	103.7	7.1	2.4	1.2	0.6	0.6	0.0	0.0	0.0	0.0
72.5°	783.3	54.2	4.7	1.8	1.2	0.6	0.0	0.0	0.0	0.0	0.0
75°	366.0	24.2	2.9	1.2	0.6	0.6	0.0	0.0	0.0	0.0	0.0
77.5°	80.7	11.2	1.8	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	15.3	4.1	1.2	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.3	1.8	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	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)