

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: LUMARK

Report Number: P963671

Luminaire Tested: **NAV-SB3A-830-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963671
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-830-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9473 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 84.7
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: 24 FT

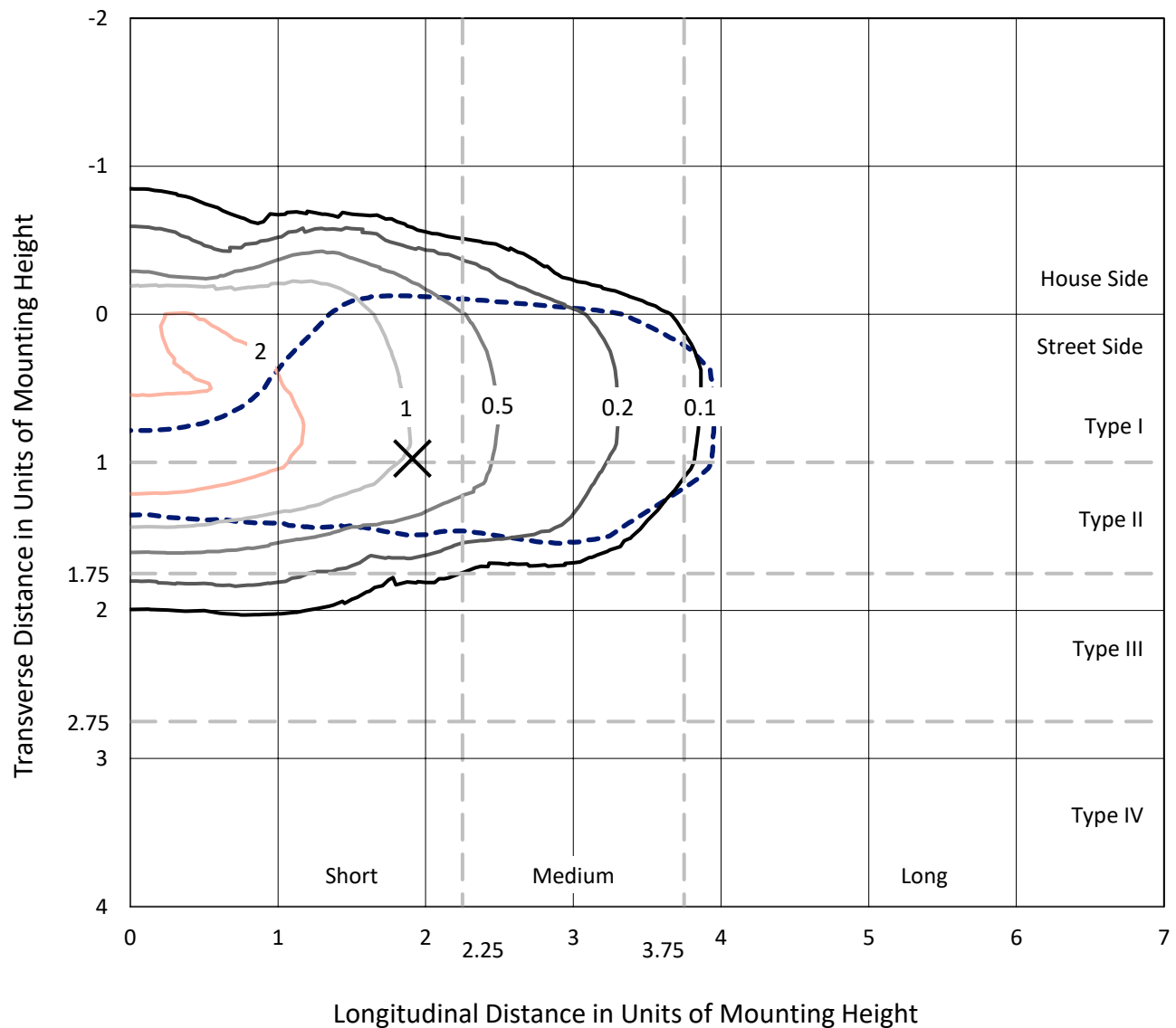


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Iso-Footcandle Lines of Horizontal Illumination

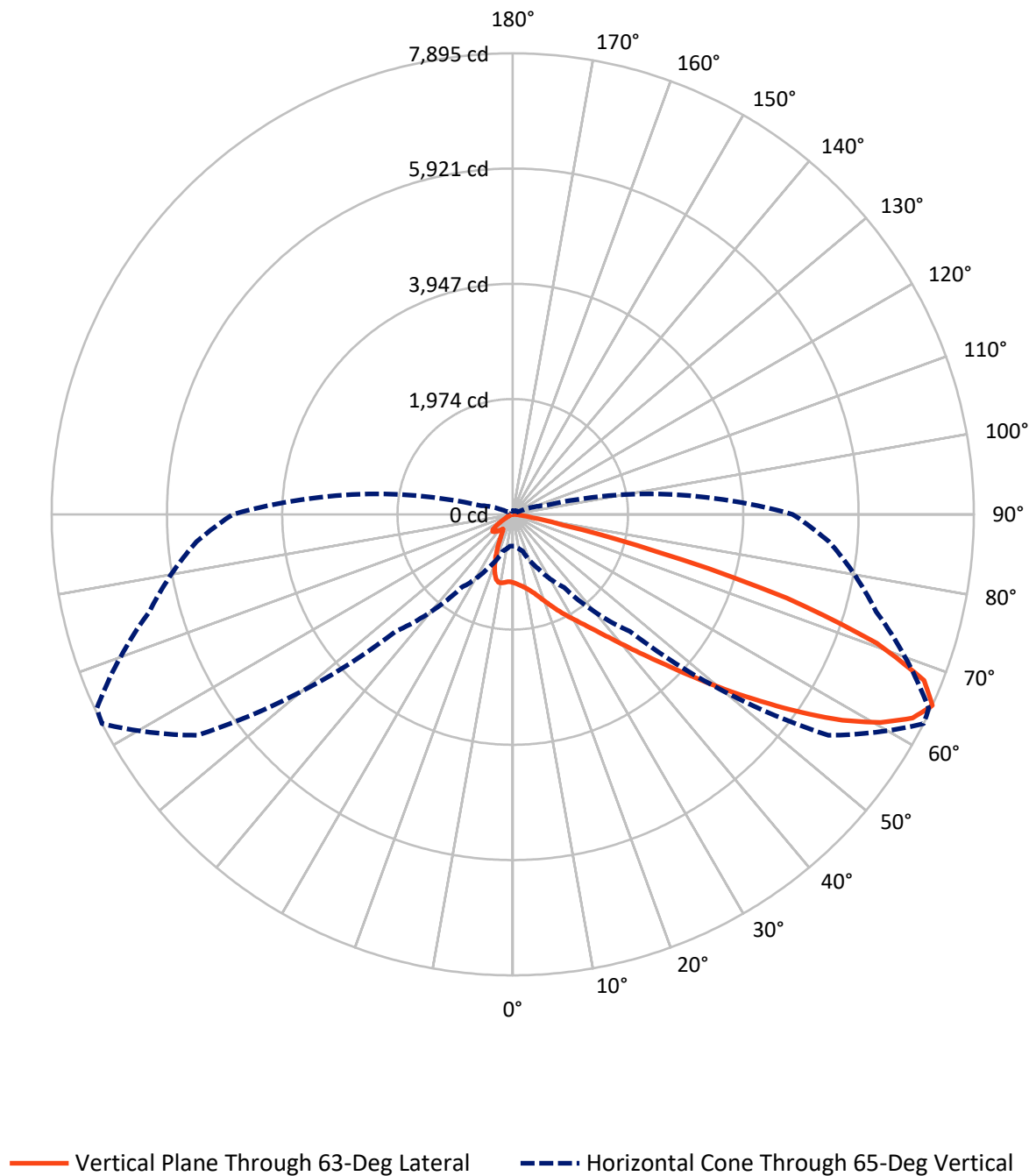
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1392.5	0.0	1392.5
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	8080.6	0.0	8080.6
	% Fixture	85.3	0.0	85.3
Total	Lumens	9473.0	0.0	9473.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.2	1.2
10°-20°	305.6	3.2
20°-30°	532.2	5.6
30°-40°	959.2	10.1
40°-50°	1902.5	20.1
50°-60°	2591.5	27.4
60°-70°	2068.5	21.8
70°-80°	936.0	9.9
80°-90°	67.3	0.7
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°	9473.0	100.0
0°-180°	9473.0	100.0

Coefficient of Utilization



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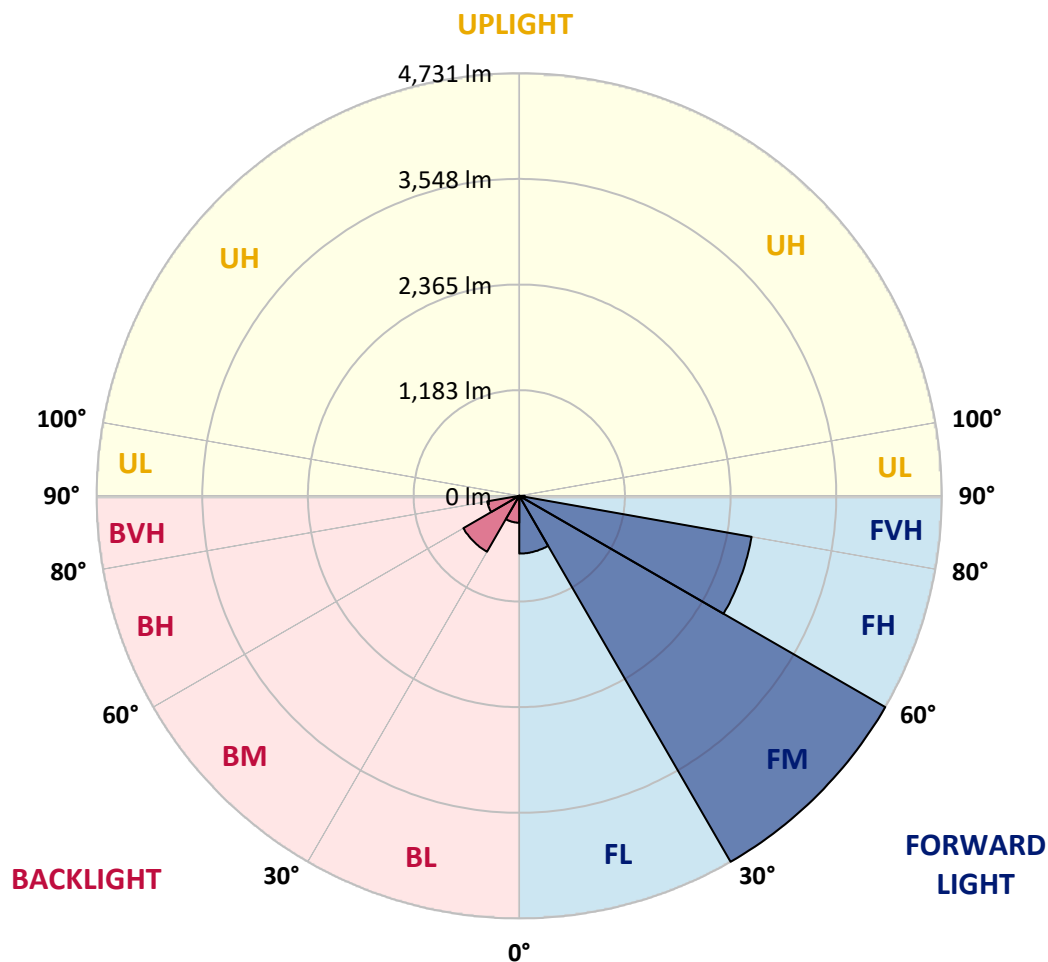
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	646.6	6.8			
FM	(30°-60°)	4730.6	49.9			
FH	(60°-80°)	2641.0	27.9			G2/5000
FVH	(80°-90°)	62.3	0.7			G1/100
BL	(0°-30°)	301.4	3.2	B1/500		
BM	(30°-60°)	722.6	7.6	B1/1000		
BH	(60°-80°)	363.5	3.8	B1/500		G1/500
BVH	(80°-90°)	5.0	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1
2.5°	1196.5	1193.3	1197.8	1195.9	1194.5	1192.0	1190.6	1189.3	1186.7	1184.8	1177.0
5°	1199.8	1197.8	1202.4	1206.3	1210.2	1214.1	1216.1	1218.7	1216.1	1210.8	1203.0
7.5°	1172.4	1171.1	1180.9	1192.6	1210.2	1225.2	1241.5	1250.6	1251.2	1249.3	1240.9
10°	1170.4	1167.2	1177.0	1191.4	1214.1	1240.9	1269.6	1289.0	1291.7	1300.1	1291.0
12.5°	1201.1	1197.8	1211.6	1227.1	1250.6	1278.7	1313.8	1341.2	1345.1	1356.8	1350.3
15°	1252.6	1248.0	1263.6	1283.8	1313.8	1345.7	1382.9	1407.6	1410.9	1425.3	1413.6
17.5°	1312.5	1308.0	1326.2	1347.7	1380.3	1423.9	1467.0	1494.3	1498.2	1507.4	1485.8
20°	1389.4	1383.5	1397.9	1417.5	1452.0	1504.1	1555.6	1594.7	1594.1	1594.1	1558.8
22.5°	1478.7	1469.5	1481.9	1497.6	1530.2	1593.4	1661.8	1708.1	1708.1	1689.8	1631.9
25°	1574.5	1565.4	1579.1	1593.4	1622.1	1693.8	1774.0	1831.3	1833.9	1802.6	1710.1
27.5°	1694.4	1682.7	1693.1	1710.1	1727.0	1800.0	1895.1	1961.6	1963.0	1914.7	1784.3
30°	1925.2	1891.8	1859.4	1841.1	1848.9	1921.3	2022.8	2096.5	2103.0	2036.6	1865.2
32.5°	2347.5	2340.9	2226.2	2076.3	1998.1	2051.5	2165.6	2254.3	2258.2	2172.8	1970.0
35°	3003.7	2995.9	2811.5	2526.0	2271.2	2226.2	2338.9	2443.9	2441.2	2344.8	2106.3
37.5°	3787.1	3779.9	3536.8	3154.8	2742.4	2490.1	2562.5	2672.6	2688.9	2562.5	2282.3
40°	4456.3	4429.6	4275.8	3907.6	3367.9	2928.1	2880.6	2953.5	2970.4	2820.6	2505.8
42.5°	4963.4	4940.6	4862.4	4632.3	4125.3	3575.9	3255.3	3283.3	3302.1	3122.4	2762.6
45°	5226.0	5220.7	5252.1	5230.6	4896.9	4371.0	3791.0	3674.3	3681.5	3456.6	3053.9
47.5°	5263.2	5260.5	5403.3	5605.3	5560.3	5267.7	4478.5	4161.8	4136.4	3834.0	3370.6
50°	5044.1	5039.0	5312.7	5691.3	6003.5	6021.1	5259.3	4711.1	4655.1	4224.3	3701.0
52.5°	4344.9	4343.6	4793.3	5423.5	6159.2	6680.6	6030.9	5314.6	5220.7	4637.5	4050.3
55°	3343.2	3367.3	3882.8	4627.8	5875.1	6998.0	6723.6	5984.6	5840.6	5053.2	4372.2
57.5°	2368.3	2403.5	2913.2	3576.5	4994.0	6810.3	7192.2	6655.8	6500.8	5467.8	4698.8
60°	1272.1	1303.4	1813.7	2605.5	3715.3	6110.3	7439.1	7238.4	7091.8	5861.4	4993.4
62.5°	757.9	768.3	979.5	1682.0	2513.0	4668.2	7334.3	7682.3	7561.7	6191.8	5249.4
65°	544.2	546.1	652.3	1027.0	1525.6	2836.2	6598.4	7894.8	7857.5	6440.8	5439.1
67.5°	458.2	456.8	501.1	682.3	1039.5	1420.8	5057.2	7594.3	7752.0	6598.4	5546.7
70°	393.0	394.9	447.1	499.9	781.4	804.2	2514.2	6612.2	6948.5	6640.2	5540.1
72.5°	292.6	299.1	347.4	455.5	589.8	553.3	868.1	4902.8	5510.8	6256.3	5252.7
75°	206.6	209.8	244.4	383.2	439.9	402.7	443.1	2534.5	3313.9	4796.5	4299.3
77.5°	159.0	164.9	185.1	267.8	433.4	282.8	271.1	877.2	1347.7	2897.5	2947.7
80°	86.0	96.5	133.6	193.5	304.3	200.1	134.3	349.3	456.8	1354.8	1136.5
82.5°	44.3	49.5	93.2	139.5	173.3	174.7	66.5	145.3	188.3	418.4	155.8
85°	17.6	21.5	62.5	76.9	89.3	86.0	29.9	58.6	67.8	116.0	47.6
87.5°	3.9	6.6	22.9	17.6	16.9	18.2	7.2	13.7	13.0	13.7	8.5
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°	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1	1169.1
2.5°	1176.3	1173.7	1166.6	1158.8	1149.6	1144.4	1141.1	1140.5	1135.9	1132.6	1135.9
5°	1195.9	1193.3	1179.6	1163.3	1145.6	1132.0	1119.0	1107.2	1090.3	1087.0	1085.8
7.5°	1235.0	1227.8	1205.6	1183.5	1150.3	1110.5	1062.3	1006.9	957.4	942.4	935.2
10°	1283.2	1273.5	1245.4	1206.3	1132.6	1024.5	907.8	799.6	713.6	689.5	680.4
12.5°	1337.9	1329.4	1292.3	1220.0	1059.0	862.8	684.3	550.0	466.6	445.8	439.9
15°	1403.1	1390.7	1339.3	1199.1	927.4	655.6	469.9	390.3	360.4	356.5	352.6
17.5°	1472.2	1452.0	1381.0	1124.2	750.1	466.0	363.0	340.2	327.2	323.3	321.3
20°	1535.4	1509.3	1405.7	1010.8	560.5	363.0	325.2	310.2	298.5	293.9	291.3
22.5°	1598.6	1561.5	1405.7	856.4	420.4	322.0	298.5	284.7	271.1	265.3	262.0
25°	1664.5	1614.9	1381.0	684.3	338.2	295.2	273.1	258.1	246.3	239.1	236.6
27.5°	1728.4	1659.9	1324.3	521.3	301.0	271.7	249.6	235.2	224.2	218.9	218.9
30°	1788.9	1704.2	1244.8	395.5	277.0	249.0	228.1	215.8	204.6	199.5	200.1
32.5°	1871.0	1760.2	1160.0	324.5	256.1	227.4	208.6	196.8	187.1	183.2	183.2
35°	1985.1	1843.1	1087.0	318.7	238.5	209.8	191.0	179.9	170.0	166.9	166.9
37.5°	2146.7	1976.6	1048.6	357.8	224.2	194.2	176.6	164.9	155.8	153.1	152.5
40°	2346.1	2157.8	1069.5	396.9	214.4	180.5	163.6	151.8	144.0	140.7	140.1
42.5°	2582.7	2381.3	1184.8	426.9	207.9	168.8	151.2	138.2	132.9	131.6	131.6
45°	2854.4	2627.0	1361.4	458.8	197.4	157.7	138.8	129.0	125.2	124.4	123.8
47.5°	3163.4	2896.9	1566.0	498.6	187.1	147.3	129.0	122.5	119.3	118.0	118.0
50°	3469.6	3168.6	1776.5	520.7	178.6	137.6	121.3	116.0	113.4	112.7	112.7
52.5°	3790.3	3448.2	1946.7	499.9	171.4	129.7	114.7	110.8	108.1	107.5	107.5
55°	4095.9	3674.3	1976.0	424.2	157.0	121.9	107.5	105.6	102.3	102.3	101.7
57.5°	4359.2	3787.7	1768.7	311.5	142.7	110.2	100.3	98.4	95.8	95.1	94.5
60°	4601.0	3755.1	1365.3	209.8	127.1	98.4	91.2	89.9	87.3	84.0	83.4
62.5°	4737.2	3611.7	933.9	136.8	111.4	86.0	80.8	80.2	74.3	67.8	66.5
65°	4788.7	3317.2	582.6	99.7	93.2	73.6	69.7	68.5	60.0	52.8	52.2
67.5°	4743.7	2832.3	293.9	78.8	73.6	61.3	57.4	57.4	51.5	45.0	44.3
70°	4563.9	2123.3	123.8	63.2	56.7	46.9	46.9	49.5	43.7	36.5	35.9
72.5°	4173.5	1428.5	65.8	48.2	42.3	33.2	38.4	40.4	34.5	27.4	27.4
75°	3317.8	871.4	45.6	35.9	26.8	23.5	29.3	30.6	23.5	18.2	17.6
77.5°	2269.2	500.5	30.6	22.9	16.9	13.7	20.2	18.9	12.4	8.5	9.1
80°	996.4	208.6	17.6	10.5	6.6	5.2	7.2	5.2	3.9	2.6	2.6
82.5°	116.6	48.9	6.6	3.9	2.6	1.3	0.6	0.0	0.0	0.0	0.0
85°	24.1	5.8	3.3	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	1.3	0.6	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)