

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: P960857

Luminaire Tested: **NAV-SB1D-730-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960857
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-730-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7899.7 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

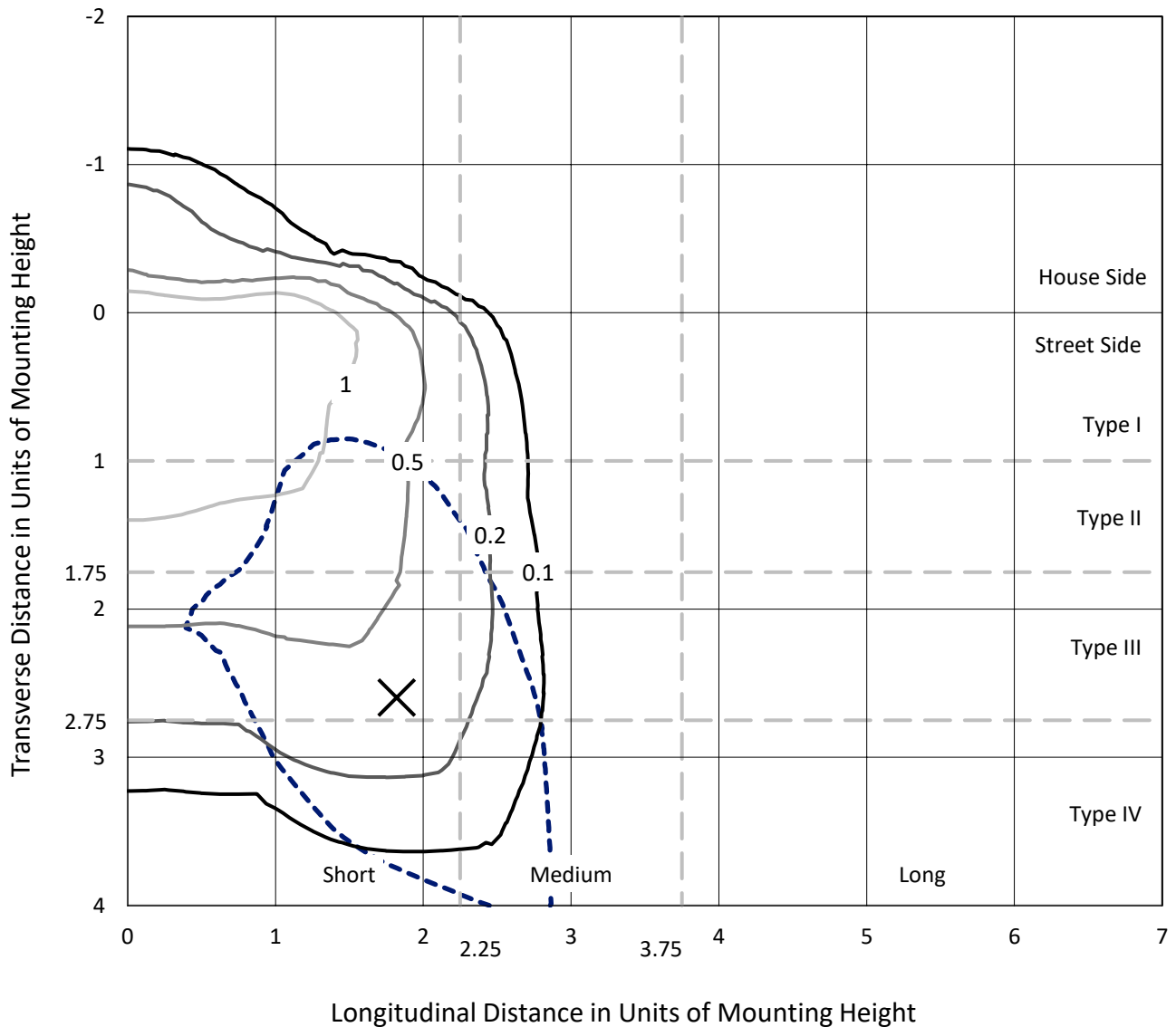
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P960857
 CATALOG NUMBER: NAV-SB1D-730-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

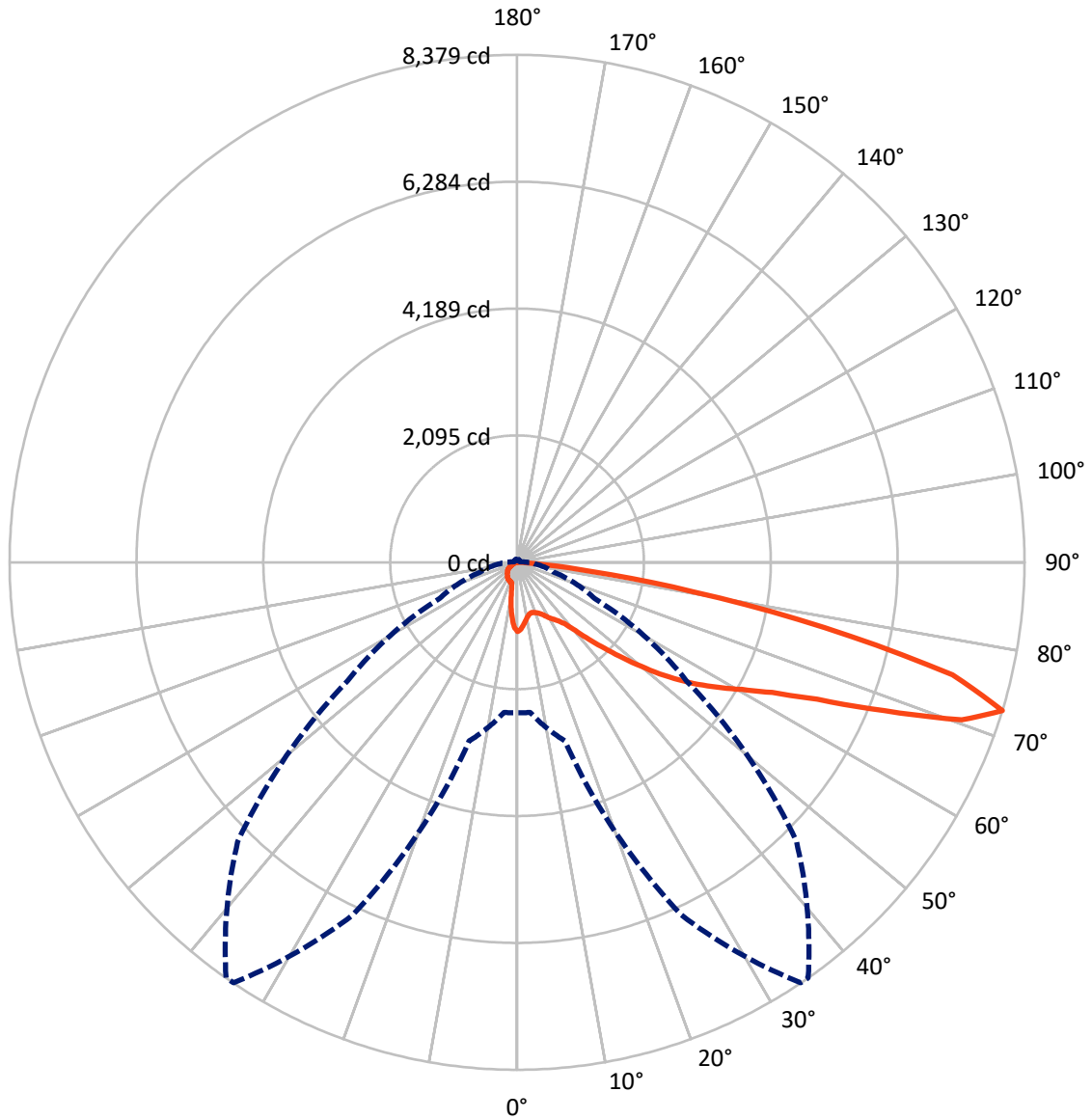
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P960857
CATALOG NUMBER: NAV-SB1D-730-U-T4FT-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P960857
 CATALOG NUMBER: NAV-SB1D-730-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	889.1	0.0	889.1
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	7010.6	0.0	7010.6
	% Fixture	88.7	0.0	88.7
Total	Lumens	7899.7	0.0	7899.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.1	1.2
10°-20°	220.1	2.8
20°-30°	357.5	4.5
30°-40°	596.5	7.6
40°-50°	1128.7	14.3
50°-60°	1793.5	22.7
60°-70°	2218.6	28.1
70°-80°	1379.1	17.5
80°-90°	111.5	1.4
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°	7899.7	100.0
0°-180°	7899.7	100.0

Coefficient of Utilization



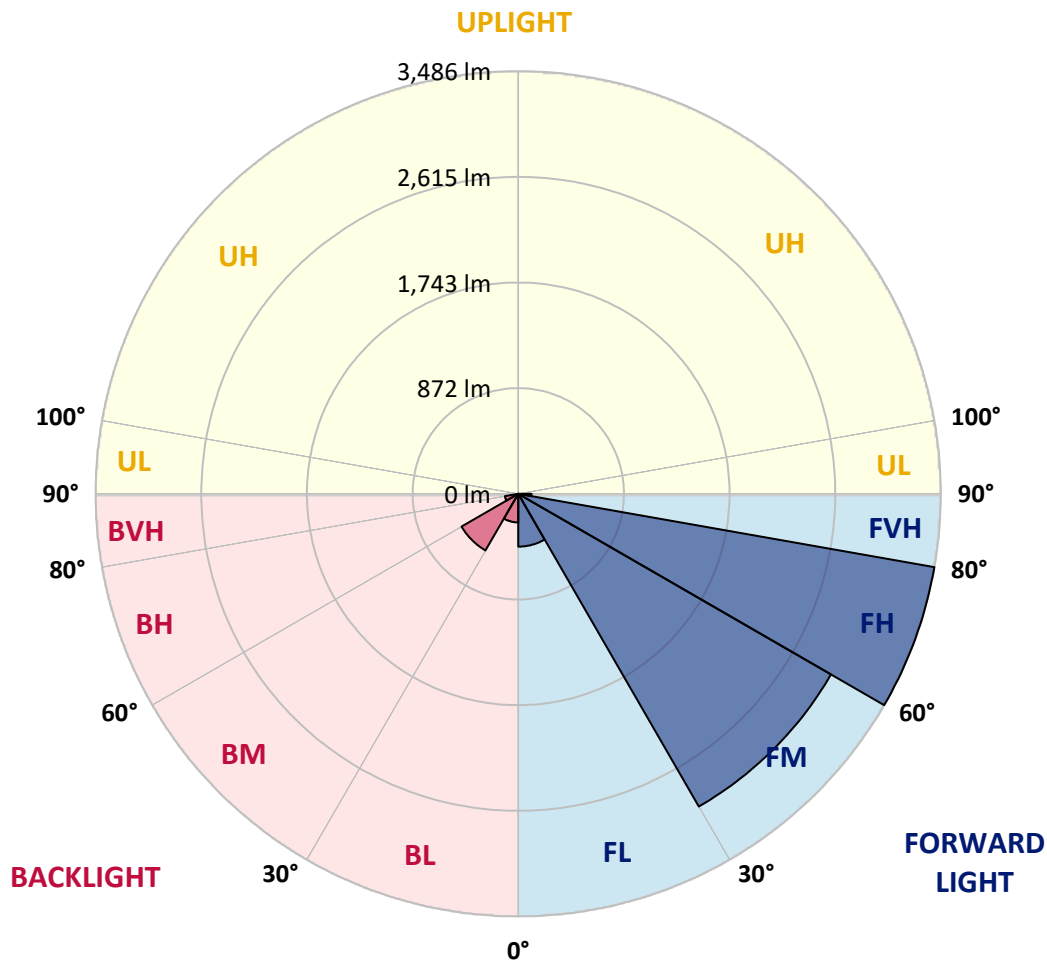
REPORT NUMBER: P960857
 CATALOG NUMBER: NAV-SB1D-730-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	435.5	5.5			
FM (30°-60°)	2979.0	37.7			
FH (60°-80°)	3486.2	44.1			G2/5000
FVH (80°-90°)	109.9	1.4			G2/225
BL (0°-30°)	236.2	3.0	B1/500		
BM (30°-60°)	539.7	6.8	B1/1000		
BH (60°-80°)	111.6	1.4	B1/500		G1/500
BVH (80°-90°)	1.5	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 IV Short



REPORT NUMBER: P960857
 CATALOG NUMBER: NAV-SB1D-730-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9
2.5°	1094.0	1103.2	1104.9	1107.9	1107.9	1111.3	1117.1	1125.2	1138.6	1145.5	1150.2
5°	1008.3	1015.3	1024.0	1030.9	1044.2	1045.9	1068.6	1090.5	1121.1	1144.3	1160.5
7.5°	922.1	930.2	941.8	958.6	975.9	981.1	1015.3	1052.3	1101.0	1144.3	1171.6
10°	861.3	861.9	872.3	889.1	916.9	923.2	964.9	1017.6	1078.4	1137.4	1181.9
12.5°	827.2	831.2	835.8	848.6	875.1	879.2	923.8	985.7	1055.8	1133.3	1194.1
15°	827.2	830.0	832.9	839.3	860.7	864.2	903.5	965.4	1044.2	1135.1	1213.8
17.5°	835.8	840.5	838.1	845.6	868.3	870.5	905.3	959.7	1043.7	1146.1	1243.9
20°	856.7	860.2	855.5	860.2	882.7	887.3	923.2	970.7	1053.5	1165.2	1281.6
22.5°	889.7	891.4	880.4	883.9	907.0	912.9	954.5	1001.9	1077.2	1195.9	1331.9
25°	931.3	934.8	918.0	922.1	944.0	951.0	999.1	1048.9	1114.8	1238.1	1396.2
27.5°	979.4	981.1	966.7	966.1	994.5	1004.3	1052.9	1106.7	1165.2	1291.4	1477.1
30°	1034.3	1039.6	1025.7	1023.4	1059.2	1067.3	1115.4	1177.9	1239.3	1371.2	1592.3
32.5°	1077.8	1081.8	1073.7	1079.5	1116.0	1122.4	1191.3	1278.7	1355.7	1484.7	1749.3
35°	1140.3	1142.6	1124.1	1134.5	1176.2	1192.4	1294.9	1419.8	1502.0	1627.1	1954.2
37.5°	1366.6	1366.6	1287.9	1236.4	1276.3	1290.8	1436.6	1597.6	1682.6	1818.1	2212.3
40°	1679.8	1674.5	1559.3	1454.1	1448.8	1477.1	1638.7	1821.6	1915.9	2047.3	2502.8
42.5°	2013.7	2005.6	1848.8	1744.6	1727.2	1737.1	1872.0	2097.7	2193.8	2326.9	2815.5
45°	2310.1	2307.8	2164.3	2024.2	1992.9	2024.2	2163.1	2420.6	2489.5	2629.6	3127.4
47.5°	2558.4	2558.4	2453.6	2362.2	2346.0	2364.6	2557.3	2779.0	2772.6	2952.0	3431.3
50°	2844.4	2842.0	2742.5	2703.1	2719.9	2746.0	3011.0	3156.4	3065.5	3268.6	3702.8
52.5°	3044.7	3058.5	3024.4	3018.0	3103.7	3148.8	3471.8	3525.7	3327.7	3569.0	3906.0
55°	3203.2	3219.4	3258.8	3303.4	3468.4	3527.4	3918.1	3875.8	3547.1	3829.5	4022.9
57.5°	3427.8	3404.6	3465.4	3553.5	3820.3	3891.5	4350.5	4206.4	3723.6	4040.9	4035.6
60°	3700.5	3703.9	3714.4	3825.5	4171.6	4263.1	4776.5	4518.9	3837.1	4170.5	3894.4
62.5°	4028.0	4033.3	4054.7	4225.5	4643.4	4729.7	5230.3	4774.8	3889.2	4134.0	3529.7
65°	4005.5	4027.5	4266.6	4850.6	5360.5	5445.6	5760.0	4954.2	3810.4	3800.6	2873.9
67.5°	3649.0	3684.9	4084.8	5597.3	6441.8	6536.7	6400.1	4989.5	3470.6	2955.5	1874.8
70°	3181.3	3194.0	3675.0	6268.7	7693.9	7789.9	6973.2	4601.1	2633.6	1648.5	839.9
72.5°	2484.3	2487.3	3051.6	6424.5	8373.3	8378.6	6523.4	3415.7	1416.4	633.2	291.7
75°	1774.7	1757.4	2043.8	5210.1	7366.8	7425.8	4890.6	1602.2	541.2	299.3	145.2
77.5°	951.6	970.7	1156.5	3089.8	5089.1	5189.8	2668.4	461.9	275.5	203.8	96.0
80°	294.1	310.3	474.1	1414.7	2882.6	2943.4	989.2	205.5	192.2	145.2	63.1
82.5°	92.7	96.0	221.1	594.5	1196.5	1224.3	286.5	116.3	131.4	96.0	37.0
85°	26.6	27.2	98.4	221.7	295.8	301.6	80.5	45.1	75.2	59.7	19.1
87.5°	2.9	9.2	37.0	37.0	26.0	25.4	8.7	9.8	21.4	7.5	3.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P960857
 CATALOG NUMBER: NAV-SB1D-730-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9
2.5°	1147.3	1147.8	1140.3	1127.6	1113.7	1102.1	1087.6	1076.0	1067.9	1065.6	1069.7
5°	1155.4	1151.3	1129.9	1091.1	1044.8	1004.8	960.3	925.0	901.8	892.0	895.4
7.5°	1167.5	1155.9	1109.0	1032.6	944.0	865.3	785.5	723.5	684.2	664.5	667.4
10°	1177.9	1154.8	1074.3	948.1	812.7	693.4	585.8	511.1	469.4	449.8	450.3
12.5°	1187.8	1154.1	1029.2	848.0	664.5	518.6	418.5	381.4	369.9	365.8	364.7
15°	1206.3	1155.9	972.4	733.4	516.9	391.9	355.4	354.9	357.1	356.0	355.4
17.5°	1231.7	1157.6	908.2	611.8	398.8	345.5	343.8	349.0	352.5	350.8	350.2
20°	1264.7	1164.6	839.9	491.4	342.7	333.9	338.0	342.7	345.5	342.7	342.0
22.5°	1311.1	1176.8	765.3	394.7	324.7	327.1	330.6	335.7	338.7	334.6	333.9
25°	1367.8	1195.9	691.7	343.3	316.0	319.0	324.1	329.9	333.4	329.3	328.8
27.5°	1441.3	1226.5	624.0	331.7	307.4	309.1	316.6	325.3	329.9	324.7	324.7
30°	1547.7	1276.9	565.5	336.9	302.2	298.1	308.5	320.7	325.8	321.2	320.7
32.5°	1689.0	1348.1	529.6	345.0	299.8	285.4	295.2	310.9	319.5	316.6	316.6
35°	1874.2	1456.3	515.8	354.2	298.1	272.0	279.0	295.8	310.9	313.8	313.8
37.5°	2098.9	1606.8	519.8	358.3	292.8	261.1	264.6	279.0	298.7	307.9	310.3
40°	2354.1	1782.3	542.9	354.2	287.1	251.8	252.4	263.3	280.7	294.6	299.3
42.5°	2617.4	1987.2	585.8	339.2	281.9	243.6	242.0	249.5	261.1	270.9	274.9
45°	2868.2	2197.8	628.0	318.4	275.5	235.5	231.5	234.4	236.8	240.8	243.1
47.5°	3086.9	2346.0	615.9	299.3	266.8	226.3	219.4	218.2	211.3	210.7	210.1
50°	3238.0	2378.4	547.0	280.1	254.1	215.9	204.9	197.9	185.8	180.0	180.6
52.5°	3286.0	2250.5	446.9	261.1	233.3	202.0	186.3	175.4	160.3	155.1	154.6
55°	3222.4	1999.9	357.1	237.9	204.3	183.5	166.2	151.7	139.5	133.1	133.1
57.5°	3066.7	1680.9	282.5	210.7	173.6	162.7	145.2	130.8	120.4	114.0	112.9
60°	2808.5	1334.8	223.4	178.2	148.2	140.1	122.2	112.9	103.6	96.0	94.3
62.5°	2416.6	952.7	175.4	141.2	123.8	114.6	104.1	97.3	86.2	75.8	74.1
65°	1885.8	582.9	135.4	103.6	99.5	94.9	88.6	82.2	68.9	58.4	56.7
67.5°	1189.5	276.1	96.7	78.1	78.7	76.4	73.5	68.3	58.4	49.2	48.1
70°	523.9	133.7	63.7	59.7	58.4	58.4	60.8	59.0	49.8	41.1	39.4
72.5°	178.2	71.8	47.5	45.1	42.2	41.7	50.9	49.2	40.0	31.9	30.1
75°	93.2	48.1	34.7	32.4	25.4	30.6	40.5	38.2	28.4	20.8	19.1
77.5°	60.8	34.1	23.8	20.8	14.5	20.3	30.1	26.6	16.8	10.5	9.2
80°	38.2	22.5	13.9	9.8	7.0	11.0	16.2	11.6	6.4	2.4	1.7
82.5°	20.3	11.6	5.2	3.5	2.9	3.5	4.1	2.9	1.1	0.0	0.0
85°	8.1	4.1	1.7	1.1	0.6	0.0	1.1	0.6	0.0	0.0	0.0
87.5°	2.9	0.6	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)