

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: P959335

Luminaire Tested: **NAV-SB1A-740-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959335
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-740-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4050.8 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

Input Watts (W): 30.9
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

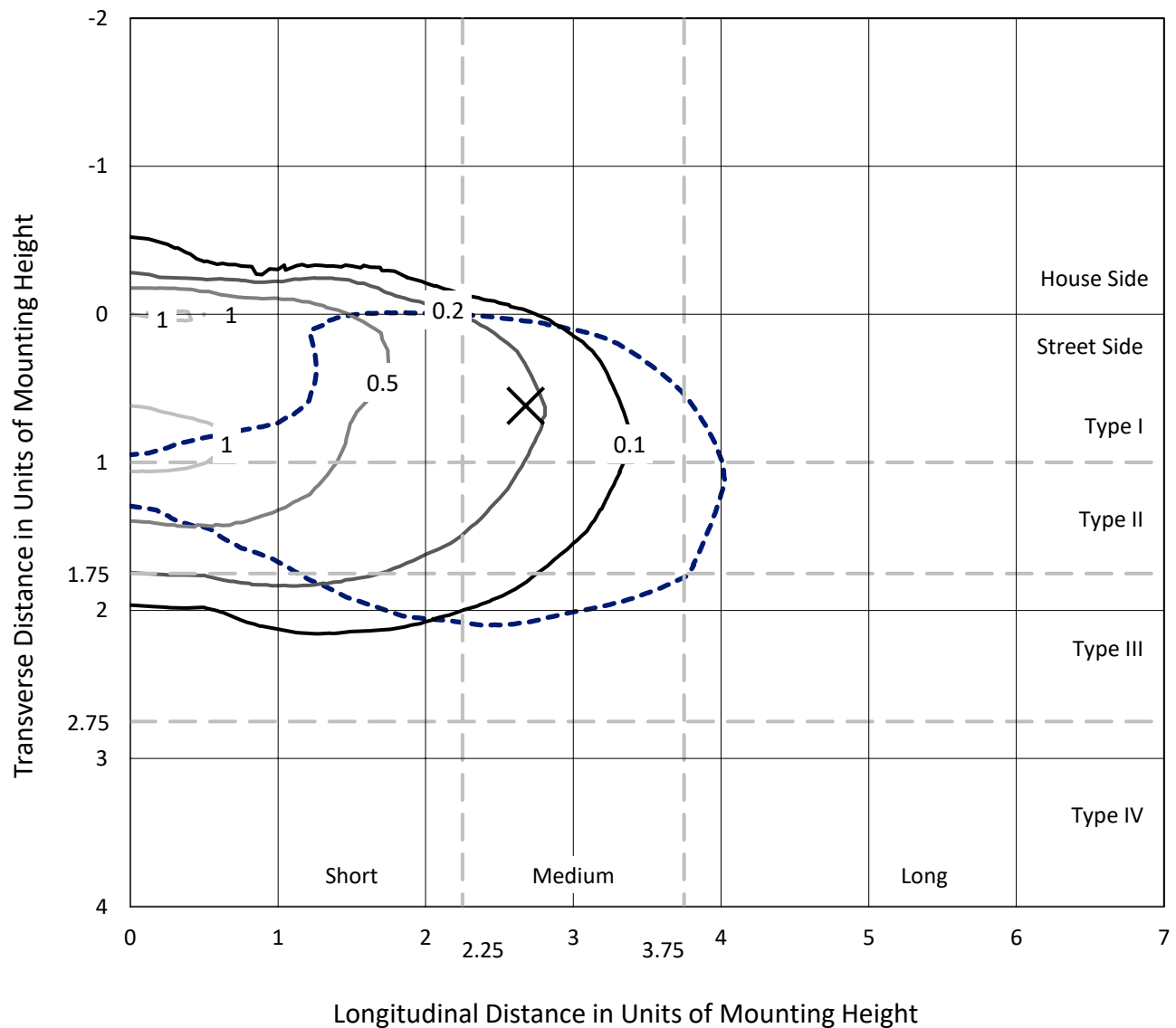


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Iso-Footcandle Lines of Horizontal Illumination

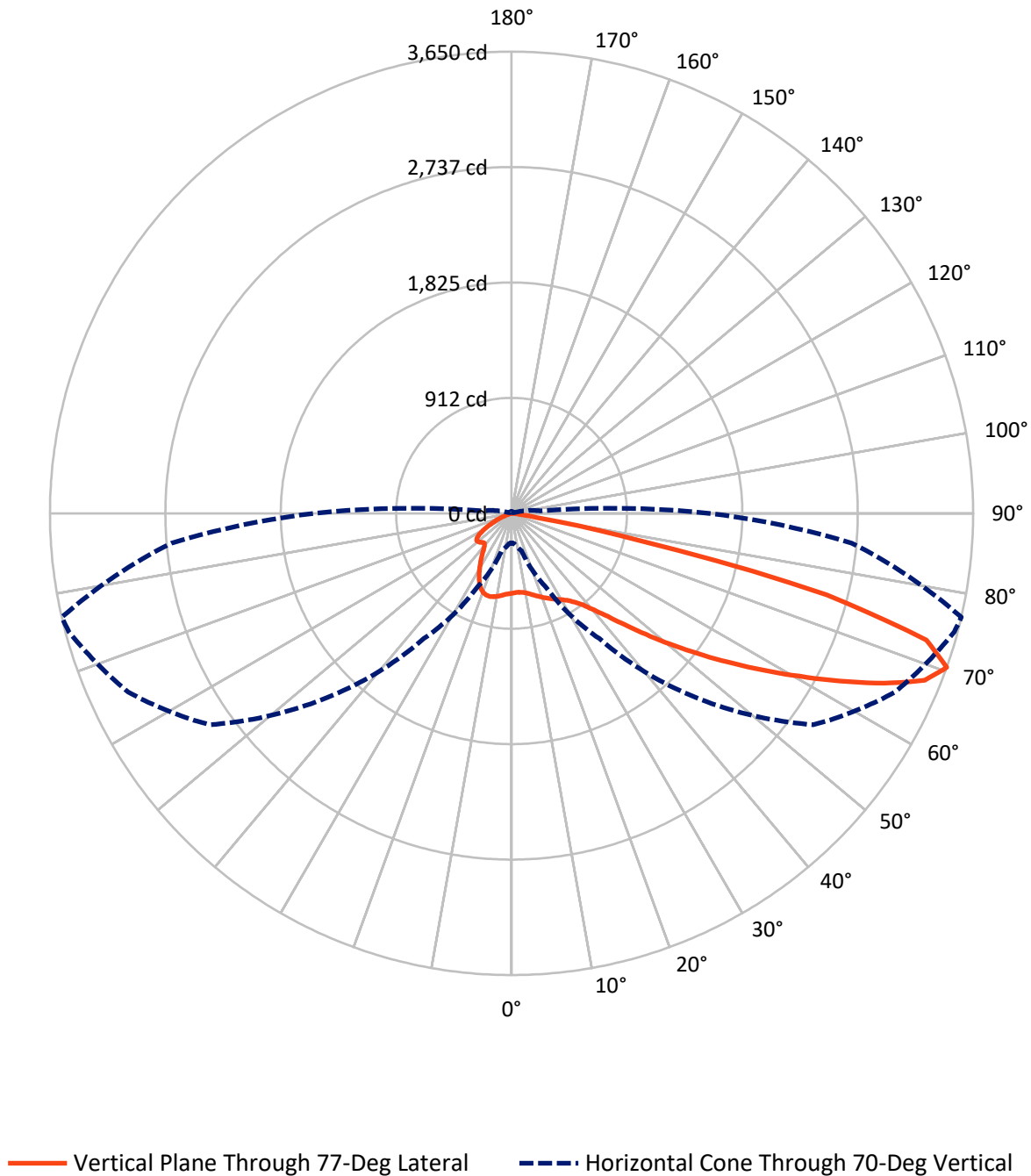
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	427.0	0.0	427.0
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3623.8	0.0	3623.8
	% Fixture	89.5	0.0	89.5
Total	Lumens	4050.8	0.0	4050.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.5	1.3
10°-20°	129.3	3.2
20°-30°	199.9	4.9
30°-40°	362.8	9.0
40°-50°	684.9	16.9
50°-60°	989.6	24.4
60°-70°	1053.4	26.0
70°-80°	558.2	13.8
80°-90°	18.3	0.5
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°	4050.8	100.0
0°-180°	4050.8	100.0

Coefficient of Utilization



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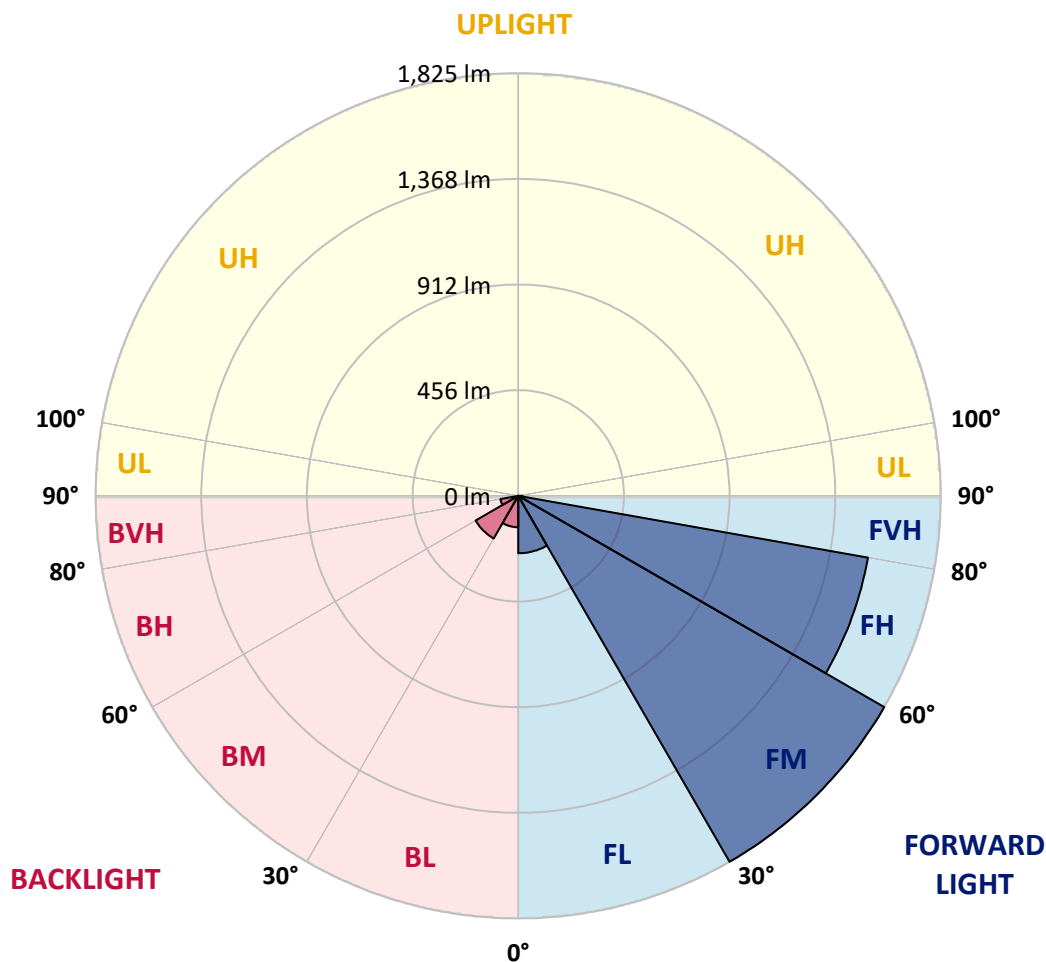
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	248.0	6.1			
FM	(30°-60°)	1824.7	45.0			
FH	(60°-80°)	1533.3	37.9			G1/1800
FVH	(80°-90°)	17.8	0.4			G1/100
BL	(0°-30°)	135.7	3.3	B1/500		
BM	(30°-60°)	212.6	5.2	B0/220		
BH	(60°-80°)	78.3	1.9	B0/110		G0/110
BVH	(80°-90°)	0.5	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-G1

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	631.8	631.8	631.8	631.8	631.8	631.8	631.8	631.8	631.8	631.8	631.8
2.5°	593.3	598.6	597.8	601.4	602.7	607.8	612.9	619.8	627.5	627.2	632.3
5°	559.8	565.1	566.4	571.2	577.4	585.3	595.8	609.6	623.9	626.3	636.4
7.5°	520.1	525.7	529.0	538.7	550.0	566.4	583.5	603.7	627.5	630.8	650.6
10°	480.4	485.5	489.8	503.7	521.6	545.9	573.8	602.9	634.9	639.8	667.7
12.5°	455.8	460.7	465.6	477.5	499.9	529.5	567.3	606.5	647.2	654.2	691.0
15°	447.2	451.5	455.3	466.1	486.8	520.6	566.1	614.0	662.8	672.0	719.0
17.5°	448.4	450.7	453.3	461.5	481.6	516.5	568.4	626.7	681.2	689.4	747.2
20°	455.8	457.2	457.4	463.0	480.9	516.0	573.0	639.0	698.6	709.6	775.1
22.5°	465.4	465.9	465.4	469.1	485.7	519.8	579.1	653.8	718.0	728.3	803.3
25°	509.5	499.9	487.6	480.1	493.9	527.3	588.3	673.8	739.3	749.3	830.7
27.5°	647.0	619.1	575.0	525.7	510.9	537.9	601.2	694.0	760.8	769.8	860.1
30°	870.0	833.4	758.7	647.5	565.1	560.5	617.8	714.2	783.5	793.2	891.5
32.5°	1093.6	1084.7	998.5	844.4	687.1	610.6	645.4	741.6	813.7	821.4	934.0
35°	1319.7	1301.5	1230.9	1078.7	875.1	712.7	691.5	777.4	853.4	862.1	995.9
37.5°	1492.9	1481.9	1438.2	1312.8	1098.2	870.2	770.3	832.9	910.9	920.7	1075.1
40°	1645.8	1640.7	1626.0	1543.3	1347.6	1076.5	892.8	918.9	990.8	1002.2	1172.4
42.5°	1766.1	1778.2	1786.6	1763.5	1604.7	1311.8	1057.5	1039.7	1102.1	1113.8	1296.2
45°	1889.2	1893.3	1927.3	1960.5	1860.0	1557.9	1243.2	1181.1	1240.5	1255.0	1444.5
47.5°	1968.2	1984.6	2044.5	2103.0	2074.6	1802.0	1442.8	1348.1	1400.9	1428.2	1610.8
50°	1974.0	2005.0	2087.4	2189.5	2230.9	2034.2	1659.7	1538.4	1594.5	1624.6	1788.4
52.5°	1876.2	1924.2	2051.8	2201.3	2315.4	2230.9	1884.1	1728.8	1800.6	1840.1	1972.5
55°	1438.4	1501.3	1918.1	2137.3	2318.7	2380.0	2102.5	1927.0	2030.3	2074.9	2171.6
57.5°	1253.2	1284.9	1508.0	2026.3	2257.0	2440.2	2300.0	2115.8	2280.3	2335.6	2359.5
60°	1042.7	1084.3	1264.7	1844.7	2173.4	2446.1	2474.5	2359.3	2551.2	2613.3	2532.1
62.5°	708.6	753.9	933.2	1532.6	2059.0	2443.3	2617.4	2610.1	2852.3	2919.1	2678.1
65°	439.0	467.4	585.6	1251.4	1899.1	2446.3	2767.1	2914.5	3170.0	3237.8	2791.2
67.5°	346.9	359.9	421.6	960.8	1623.6	2377.3	2916.5	3200.7	3469.0	3522.7	2825.7
70°	233.1	241.0	306.7	644.1	1208.0	2058.5	2913.7	3344.5	3623.1	3649.9	2699.8
72.5°	122.8	128.9	179.3	298.3	729.6	1463.2	2456.0	3172.6	3469.8	3429.4	2307.7
75°	61.4	71.6	120.7	151.4	311.6	816.0	1525.1	2501.3	2731.0	2574.5	1480.6
77.5°	46.5	56.3	99.7	99.7	108.4	274.7	646.0	1364.3	1258.3	1047.8	434.6
80°	29.7	38.3	87.2	75.4	45.3	69.8	168.3	382.2	267.3	203.4	79.0
82.5°	17.4	25.1	72.7	49.9	25.3	25.8	47.6	81.4	69.3	54.0	24.3
85°	6.9	16.4	49.9	19.7	9.9	6.4	14.3	17.4	14.3	10.8	6.1
87.5°	0.0	3.8	8.7	0.0	0.7	0.5	1.0	1.2	1.2	1.0	2.0
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°	631.8	631.8	631.8	631.8	631.8	631.8	631.8	631.8	631.8	631.8	631.8
2.5°	634.7	635.2	636.7	636.9	633.3	628.7	627.0	626.3	623.2	622.9	623.4
5°	642.4	644.6	642.4	635.7	619.8	597.6	580.7	566.8	554.3	550.5	548.2
7.5°	657.6	660.0	653.1	627.0	587.1	542.8	503.0	474.8	449.5	440.0	436.1
10°	679.7	682.8	661.0	608.3	537.7	466.6	399.0	351.5	314.4	299.3	292.9
12.5°	707.4	708.6	665.3	579.9	473.6	372.0	276.2	225.4	192.4	180.1	176.3
15°	737.8	735.9	665.8	541.3	386.0	263.0	180.3	148.1	134.8	130.7	130.7
17.5°	769.8	762.3	655.7	485.5	290.1	179.8	133.8	126.1	123.8	122.8	122.5
20°	801.2	784.5	636.9	412.7	208.3	134.3	121.5	119.2	118.0	117.5	117.0
22.5°	829.8	801.4	605.0	328.0	151.2	118.7	114.9	112.9	110.5	109.5	109.3
25°	857.7	811.2	560.0	248.9	121.0	111.0	107.9	104.1	101.1	99.7	99.2
27.5°	884.9	817.3	503.7	184.2	107.9	103.8	98.2	92.9	90.5	90.0	89.5
30°	913.8	819.4	439.7	137.4	100.0	94.9	86.7	80.6	79.3	79.5	79.5
32.5°	949.0	822.5	375.3	112.5	93.4	84.2	74.4	68.1	67.0	68.1	67.8
35°	991.3	828.6	313.1	103.6	87.5	73.2	62.6	57.3	56.3	57.1	56.8
37.5°	1048.6	838.6	255.0	101.8	82.6	64.0	52.7	48.4	48.4	48.6	48.4
40°	1124.8	865.1	203.2	100.6	80.1	57.1	44.5	42.7	43.5	44.0	44.0
42.5°	1217.7	921.7	168.1	99.0	77.3	54.0	40.4	39.7	40.9	41.4	41.4
45°	1321.7	993.3	155.8	96.5	74.7	56.1	38.6	37.6	39.2	39.4	39.7
47.5°	1429.5	1063.4	154.3	93.6	72.2	59.1	38.1	35.8	37.6	37.8	38.1
50°	1538.4	1109.2	155.8	89.3	68.1	59.1	38.3	34.0	35.6	36.3	36.6
52.5°	1648.2	1130.2	154.8	79.8	60.9	55.6	38.3	32.5	34.0	34.5	34.5
55°	1754.6	1126.1	139.2	65.7	51.7	49.1	37.3	31.2	32.2	32.5	32.5
57.5°	1838.7	1069.1	110.3	51.1	41.9	40.9	34.0	29.7	30.4	30.1	30.1
60°	1882.7	943.7	78.8	39.4	33.0	32.2	29.9	27.7	28.2	26.9	26.6
62.5°	1883.2	777.9	52.7	31.2	26.3	25.6	25.6	24.8	24.3	21.7	21.0
65°	1843.2	594.0	35.1	24.8	21.2	20.0	21.5	21.2	19.5	15.9	15.4
67.5°	1752.0	389.3	26.6	19.5	16.4	15.6	17.1	17.9	16.6	13.3	13.0
70°	1564.8	226.6	22.0	15.1	12.3	11.5	13.8	15.4	13.8	10.8	10.2
72.5°	1299.8	122.3	17.9	11.3	8.4	7.7	11.0	12.5	11.0	7.9	7.7
75°	843.4	65.5	13.8	7.4	4.3	4.8	8.2	9.2	7.7	5.1	4.6
77.5°	283.2	28.9	8.7	3.6	2.0	2.0	4.8	5.6	3.6	1.7	1.5
80°	63.1	12.0	3.6	1.5	0.7	0.7	1.0	1.0	0.5	0.0	0.0
82.5°	20.7	4.8	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.9	1.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	0.2	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)