

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: P959446

Luminaire Tested: **NAV-SB1A-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

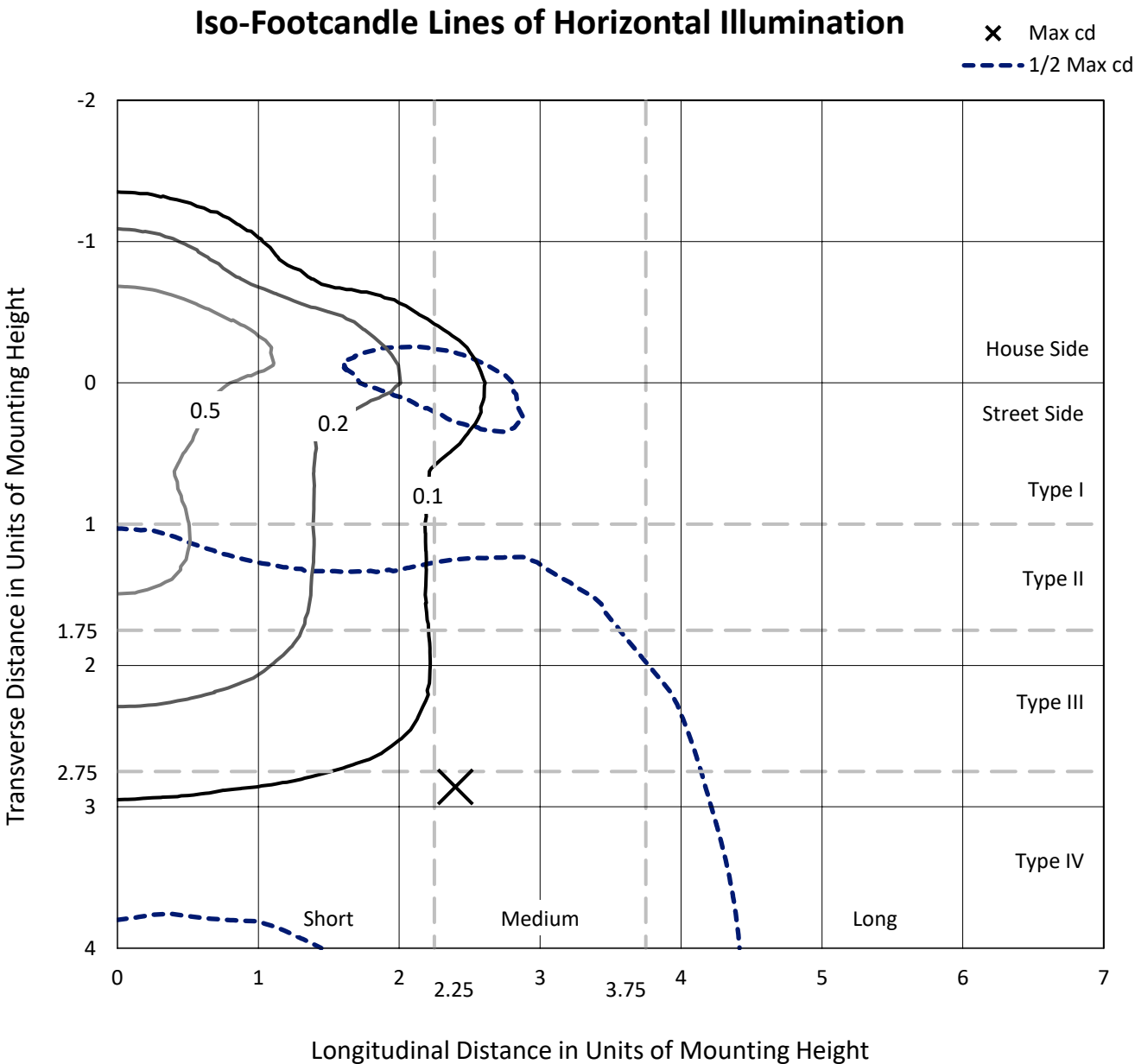
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4096.9 lumens
Efficiency: N/A
Efficacy: 132.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

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



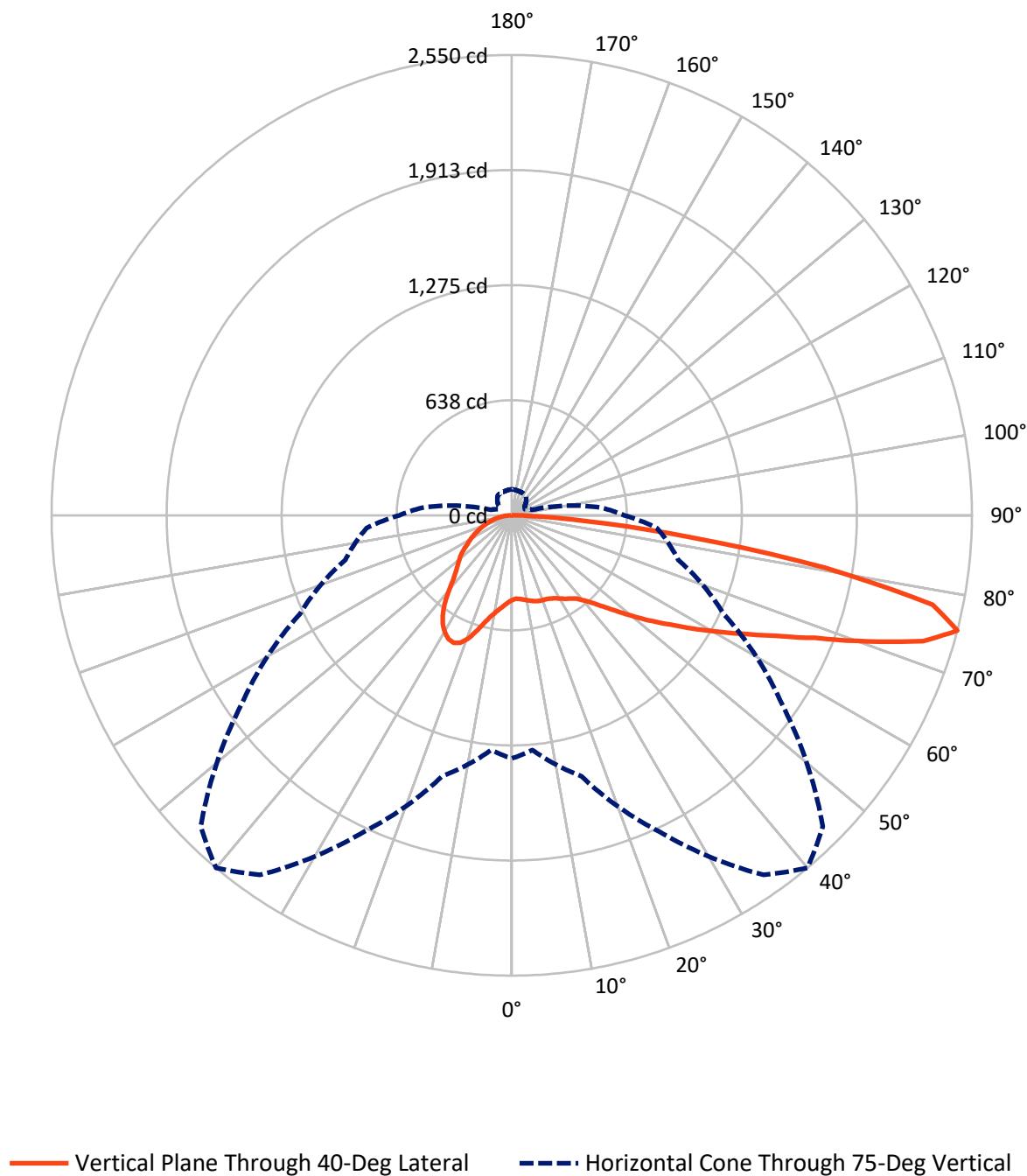
REPORT NUMBER: P959446
CATALOG NUMBER: NAV-SB1A-830-U-SL4



Based on 25 foot mounting height. Maximum calculated value = 1 fc
Type IV - Medium - N/A

REPORT NUMBER: P959446
CATALOG NUMBER: NAV-SB1A-830-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P959446

CATALOG NUMBER: NAV-SB1A-830-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1269.4	0.0	1269.4
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	2827.6	0.0	2827.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	4096.9	0.0	4096.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	1.1
10°-20°	157.0	3.8
20°-30°	286.7	7.0
30°-40°	406.6	9.9
40°-50°	549.0	13.4
50°-60°	738.6	18.0
60°-70°	937.4	22.9
70°-80°	850.8	20.8
80°-90°	124.0	3.0
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°	4096.9	100.0
0°-180°	4096.9	100.0

Coefficient of Utilization



REPORT NUMBER: P959446

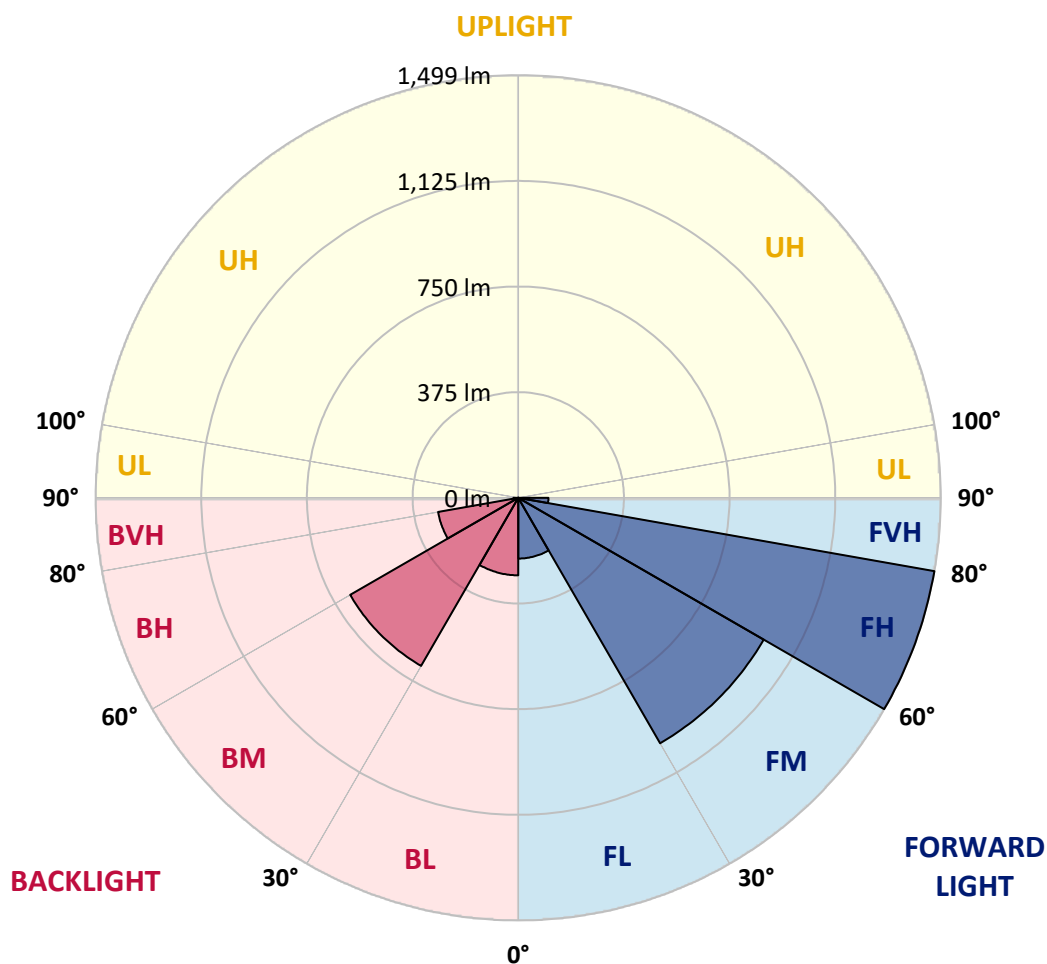
CATALOG NUMBER: NAV-SB1A-830-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	215.5	5.3			
FM	(30°-60°)	1005.7	24.5			
FH	(60°-80°)	1499.4	36.6			G1/1800
FVH	(80°-90°)	106.9	2.6			G2/225
BL	(0°-30°)	275.0	6.7	B1/500		
BM	(30°-60°)	688.5	16.8	B1/1000		
BH	(60°-80°)	288.8	7.0	B1/500		G1/500
BVH	(80°-90°)	17.1	0.4			G1/100
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 Medium



REPORT NUMBER: P959446

CATALOG NUMBER: NAV-SB1A-830-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5
2.5°	461.4	463.9	463.3	462.4	462.4	462.6	462.4	463.9	465.5	467.0	469.3
5°	466.1	468.7	467.4	466.3	465.5	465.2	464.5	464.3	465.2	467.2	470.5
7.5°	475.4	478.1	476.1	474.2	472.4	471.5	470.7	469.3	468.7	469.8	474.4
10°	485.8	488.5	486.1	482.6	479.8	478.7	477.9	476.5	475.7	476.3	481.3
12.5°	496.3	498.9	495.7	490.9	487.2	486.6	485.4	485.0	484.8	484.5	489.5
15°	506.0	508.3	504.1	498.5	494.6	493.4	492.4	493.0	494.2	495.4	501.1
17.5°	513.7	515.9	509.7	502.4	498.7	498.3	497.6	499.8	502.9	506.0	513.0
20°	520.6	522.9	515.0	505.0	500.6	500.6	500.8	505.4	509.7	514.6	524.1
22.5°	530.4	532.2	522.5	508.9	502.6	503.1	504.8	509.3	514.8	521.3	534.5
25°	545.0	546.3	534.5	516.3	509.1	510.4	512.0	514.1	519.4	527.0	544.8
27.5°	568.5	569.5	554.1	529.3	518.4	520.6	522.9	521.3	523.7	530.2	553.0
30°	601.5	602.1	582.6	549.7	534.3	535.5	535.9	529.5	525.0	530.2	558.9
32.5°	640.6	640.4	617.2	574.5	552.4	551.2	547.6	535.2	524.6	529.1	564.1
35°	701.2	698.8	668.8	609.3	572.8	566.0	557.4	541.5	526.7	528.0	568.7
37.5°	801.7	794.2	752.8	666.2	603.2	586.1	573.2	551.8	531.5	527.6	574.1
40°	914.8	905.5	859.9	744.3	648.8	621.3	600.6	566.3	539.4	529.5	582.1
42.5°	1049.1	1035.9	986.8	836.2	706.6	666.7	635.6	584.8	550.8	535.9	593.0
45°	1214.0	1196.4	1126.9	939.8	779.4	726.2	684.7	612.7	568.5	548.1	609.3
47.5°	1380.7	1385.1	1286.2	1058.4	866.8	799.6	746.2	655.0	594.1	567.5	635.6
50°	1557.8	1560.9	1444.5	1189.9	965.9	882.6	815.3	702.1	629.8	595.4	675.0
52.5°	1696.0	1696.4	1588.4	1327.5	1069.1	974.0	889.8	755.9	671.0	632.3	727.2
55°	1782.5	1781.3	1689.3	1457.7	1187.8	1069.8	972.4	817.2	721.4	675.8	793.1
57.5°	1845.3	1842.0	1758.8	1569.5	1314.2	1183.0	1065.8	886.8	780.9	727.5	879.9
60°	1869.2	1867.2	1805.9	1666.2	1447.2	1308.1	1173.6	964.5	848.5	788.5	991.3
62.5°	1878.3	1882.0	1852.2	1759.9	1589.5	1446.8	1292.0	1057.6	924.6	857.6	1108.8
65°	1910.5	1917.2	1911.1	1882.4	1750.3	1609.0	1449.1	1168.2	1007.6	931.7	1231.6
67.5°	1974.2	1980.9	1983.5	2029.1	1946.8	1811.4	1645.1	1306.0	1104.7	1008.7	1324.0
70°	1972.6	1970.7	2016.7	2145.8	2192.7	2091.5	1909.4	1475.4	1220.6	1072.6	1335.7
72.5°	1795.5	1779.9	1888.8	2144.5	2397.4	2383.9	2232.0	1694.0	1320.5	1080.4	1159.1
75°	1347.1	1305.3	1497.6	1932.6	2431.5	2550.0	2437.1	1829.6	1296.8	954.6	806.6
77.5°	576.0	534.1	760.8	1430.7	2176.2	2383.7	2249.1	1596.2	1035.1	631.2	396.2
80°	150.8	150.6	229.9	648.6	1480.0	1760.3	1544.4	1030.8	591.5	225.6	109.3
82.5°	62.3	60.9	84.6	252.3	723.1	987.8	806.2	459.8	213.6	61.1	36.3
85°	23.3	23.1	41.1	87.1	255.1	407.4	294.9	117.6	53.2	29.7	16.3
87.5°	6.6	6.3	8.9	30.2	62.1	94.3	50.4	19.4	15.0	11.7	4.8
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: P959446

CATALOG NUMBER: NAV-SB1A-830-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5
2.5°	470.0	471.1	473.0	474.6	476.5	478.7	481.7	483.7	485.6	487.0	486.1
5°	472.0	474.4	479.4	484.3	490.3	495.7	501.9	506.6	510.2	511.3	511.7
7.5°	476.3	480.2	488.7	497.1	506.6	515.5	524.6	532.4	538.6	541.1	541.3
10°	483.9	489.1	501.1	513.0	525.4	539.2	550.8	562.1	571.0	574.7	574.9
12.5°	493.4	500.0	515.7	532.2	549.3	568.3	583.4	597.4	608.4	613.5	613.5
15°	505.8	514.3	534.3	556.5	581.7	608.0	627.3	642.8	655.2	661.2	660.8
17.5°	519.4	530.6	555.9	589.3	625.4	659.9	682.5	693.8	706.6	712.5	712.3
20°	532.4	546.3	582.3	631.0	679.1	715.8	734.0	737.1	737.9	738.6	740.4
22.5°	545.8	564.6	615.6	683.6	735.1	760.6	763.1	750.1	731.8	723.3	725.8
25°	560.6	585.4	659.1	741.6	783.3	786.4	766.4	734.7	700.1	684.3	686.6
27.5°	574.9	609.5	711.2	797.0	818.2	791.4	748.4	703.4	661.6	644.9	646.9
30°	589.3	637.1	768.7	845.5	833.9	779.0	719.9	669.7	627.8	610.2	612.1
32.5°	603.8	669.2	835.1	880.5	831.2	752.8	684.5	631.9	594.9	576.5	578.9
35°	620.3	708.8	897.9	899.6	812.2	714.0	637.8	586.7	554.5	539.8	543.0
37.5°	641.9	759.0	953.2	904.4	779.2	657.3	579.7	533.2	506.8	500.0	504.8
40°	668.6	819.4	995.7	896.8	730.3	588.5	516.3	479.2	464.1	465.7	470.9
42.5°	703.4	887.0	1025.4	877.2	662.4	517.4	460.6	444.1	451.3	457.5	463.1
45°	748.6	957.1	1043.9	844.0	585.4	457.2	427.8	431.7	437.2	437.9	442.2
47.5°	806.4	1028.3	1056.1	793.8	507.0	414.8	407.0	407.8	406.8	402.2	405.7
50°	878.5	1097.4	1066.9	727.2	440.2	388.3	377.9	374.8	359.9	345.0	347.1
52.5°	960.6	1160.8	1071.4	644.7	388.3	366.1	349.2	330.0	302.1	297.5	299.0
55°	1052.0	1219.4	1059.7	543.2	344.6	337.6	312.0	289.0	286.0	282.1	282.7
57.5°	1161.0	1282.7	1035.9	430.0	299.9	304.4	279.4	282.1	276.6	270.5	269.5
60°	1280.3	1348.1	993.9	326.8	253.6	262.9	271.0	270.7	269.3	264.2	262.5
62.5°	1387.6	1391.1	911.3	250.3	213.0	230.7	252.8	252.5	251.2	248.4	247.3
65°	1451.5	1384.6	773.6	197.1	179.5	204.3	228.0	229.7	229.9	229.7	229.7
67.5°	1440.2	1308.3	584.6	156.9	151.9	177.3	203.4	205.8	207.6	208.0	208.4
70°	1312.5	1140.8	381.1	125.2	127.3	153.6	180.1	182.6	184.1	185.8	186.7
72.5°	1023.1	838.8	218.1	101.3	105.8	133.2	157.1	159.9	160.8	164.1	165.3
75°	623.4	493.2	117.8	79.7	86.9	113.9	134.3	137.6	139.1	143.0	143.4
77.5°	296.4	213.6	67.1	62.1	70.0	93.0	113.5	117.2	113.0	115.2	113.5
80°	100.1	79.3	42.3	47.4	53.5	72.6	90.8	94.5	85.8	85.4	84.6
82.5°	35.0	32.2	27.0	31.5	34.5	52.0	68.7	73.5	63.9	63.7	60.6
85°	13.7	13.0	15.0	17.1	20.6	32.0	45.2	47.6	39.4	31.8	31.3
87.5°	2.9	3.1	3.7	3.9	6.3	11.1	16.3	20.0	15.9	13.4	12.4
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)