

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: P881783

Luminaire Tested: **NAV-SB1B-835-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881783
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-835-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3319 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

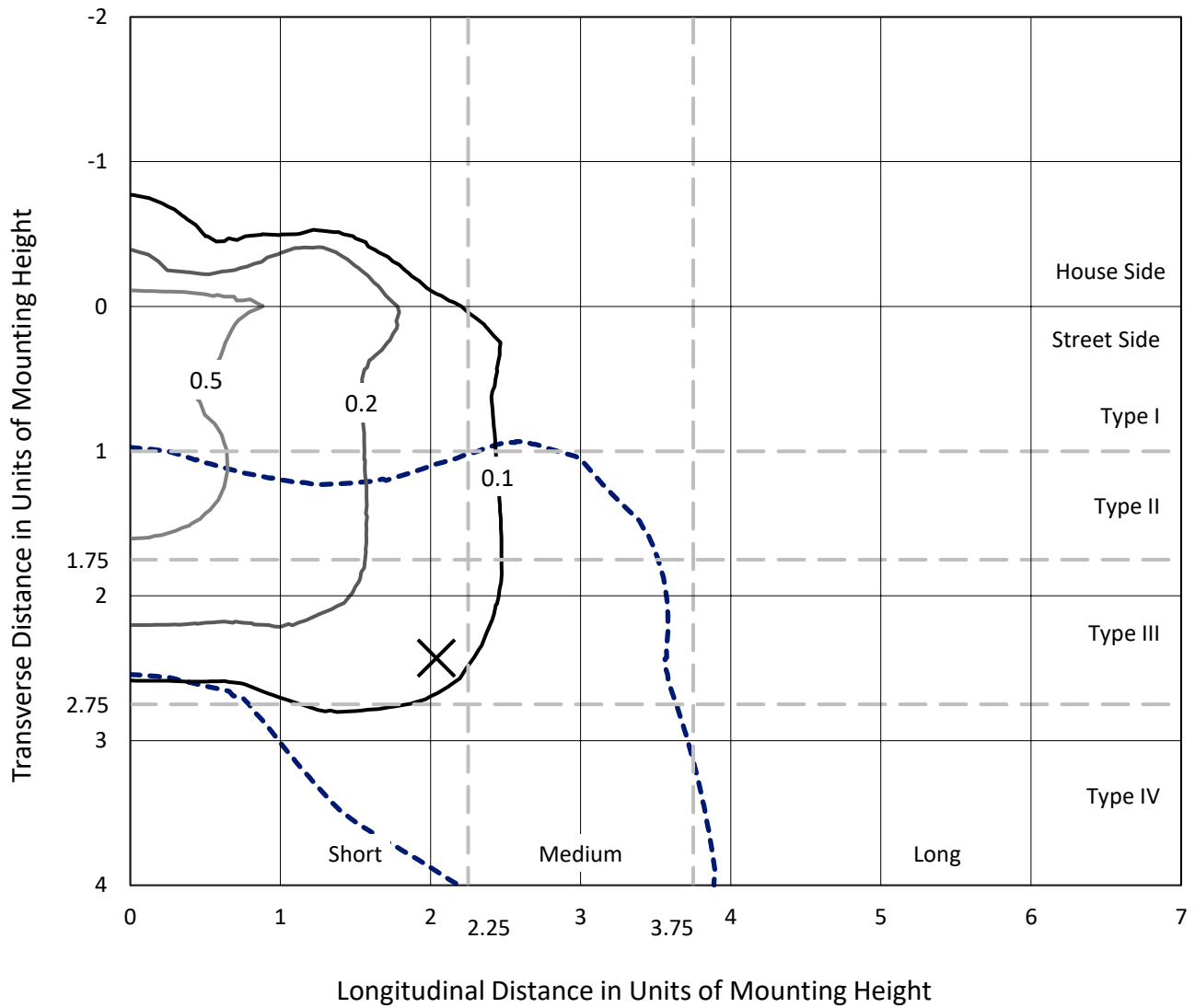
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881783
 CATALOG NUMBER: NAV-SB1B-835-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

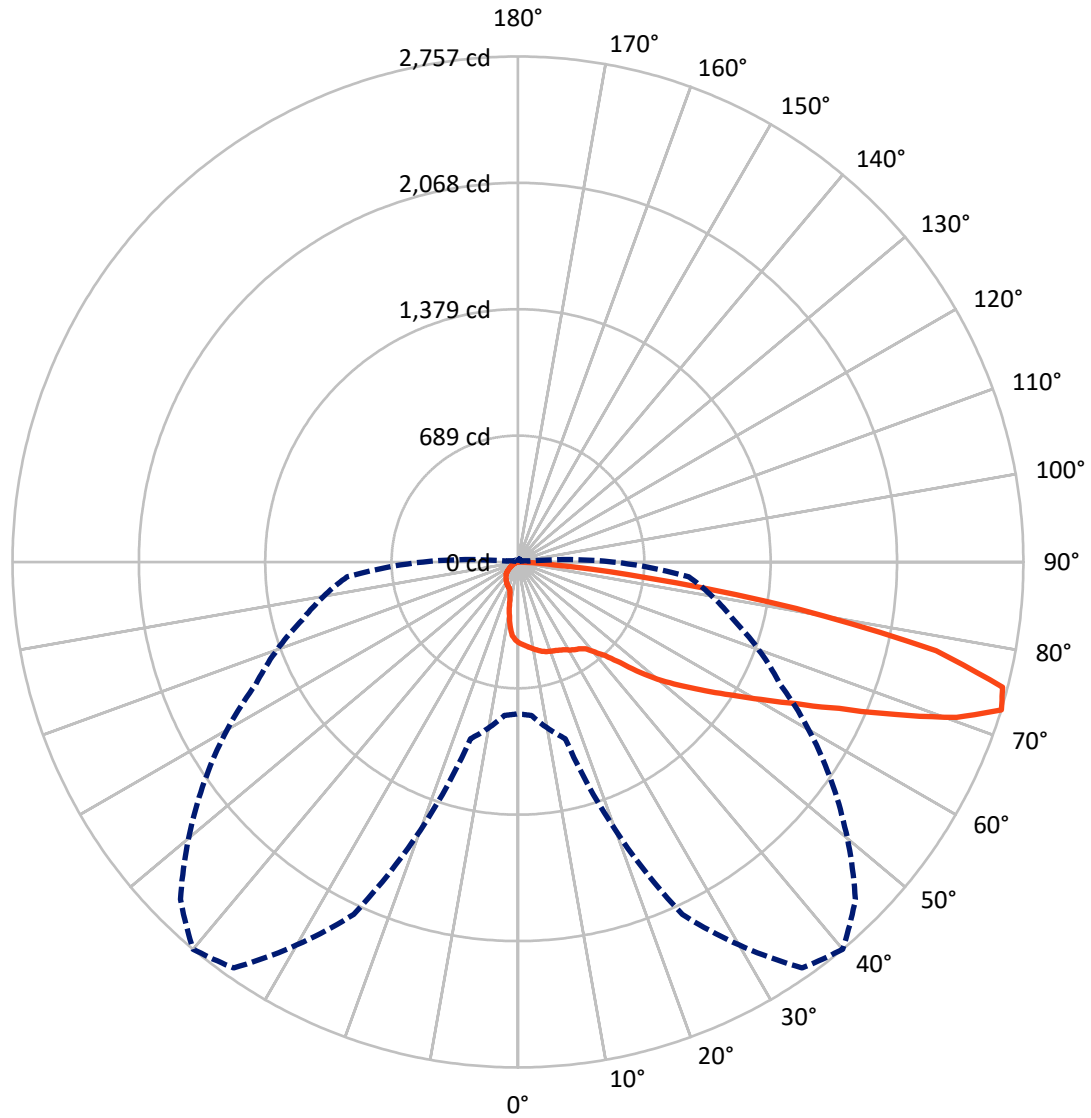
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P881783
CATALOG NUMBER: NAV-SB1B-835-U-SL4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P881783

CATALOG NUMBER: NAV-SB1B-835-U-SL4-HSS

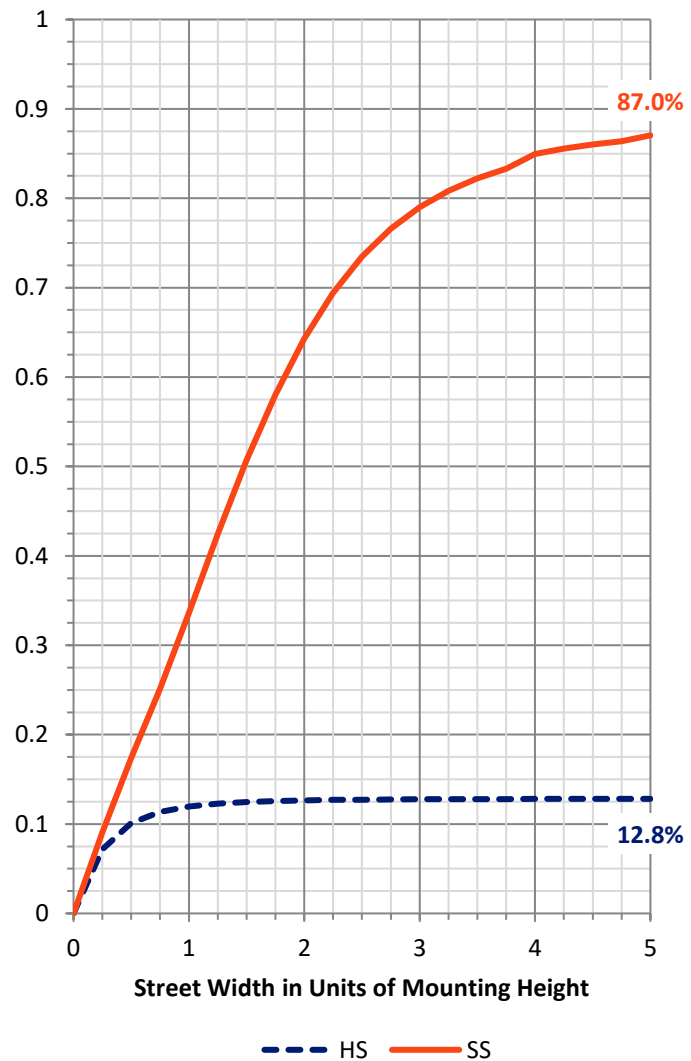
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	428.6	0.0	428.6
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2890.4	0.0	2890.4
	% Fixture	87.1	0.0	87.1
Total	Lumens	3319.0	0.0	3319.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	1.2
10°-20°	109.0	3.3
20°-30°	176.4	5.3
30°-40°	260.4	7.8
40°-50°	438.2	13.2
50°-60°	680.4	20.5
60°-70°	851.4	25.7
70°-80°	697.0	21.0
80°-90°	66.1	2.0
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°	3319.0	100.0
0°-180°	3319.0	100.0

Coefficient of Utilization



REPORT NUMBER: P881783

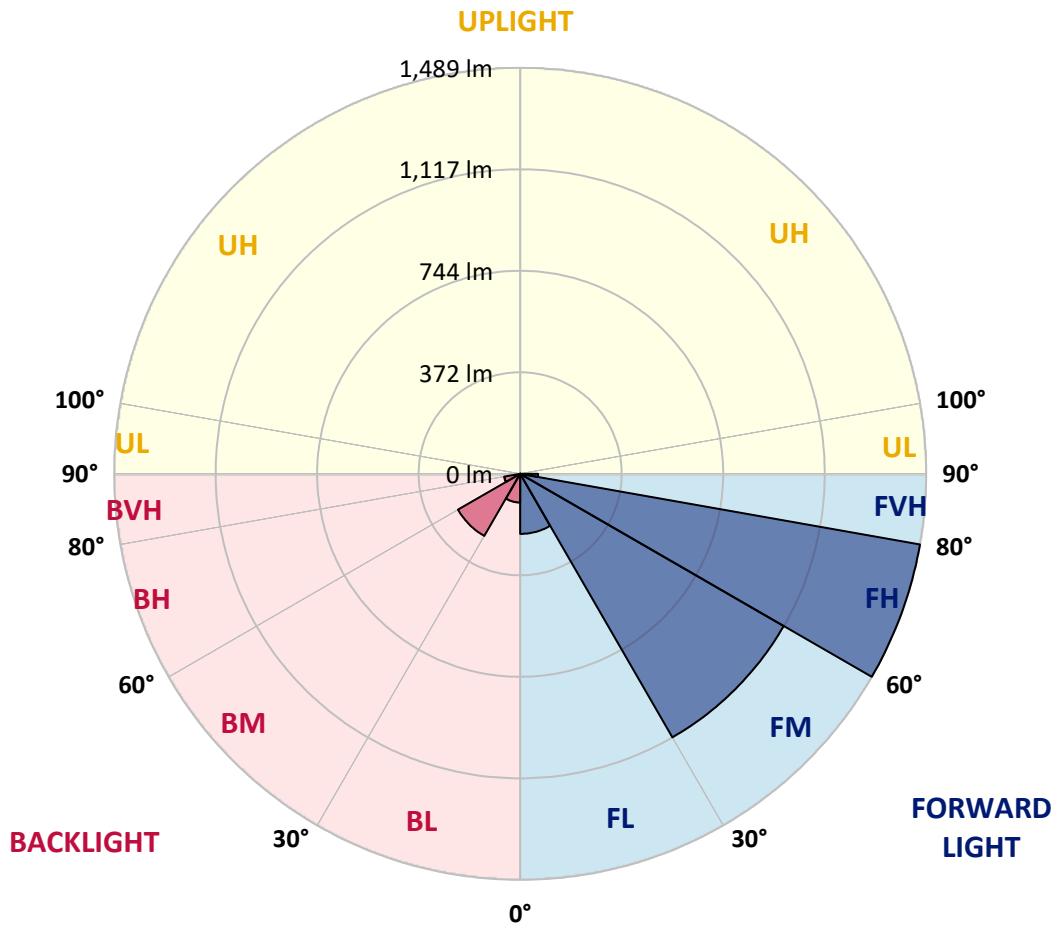
CATALOG NUMBER: NAV-SB1B-835-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	220.3	6.6			
FM (30°-60°)	1115.8	33.6			
FH (60°-80°)	1488.7	44.9			G1/1800
FVH (80°-90°)	65.6	2.0			G1/100
BL (0°-30°)	105.2	3.2	B0/110		
BM (30°-60°)	263.2	7.9	B1/1000		
BH (60°-80°)	59.7	1.8	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 IV Short



REPORT NUMBER: P881783

CATALOG NUMBER: NAV-SB1B-835-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	439.5	439.5	439.5	439.5	439.5	439.5	439.5	439.5	439.5	439.5	439.5
2.5°	452.7	454.5	453.5	451.5	451.0	450.0	448.7	448.2	446.5	445.0	443.2
5°	465.5	467.2	466.0	463.2	462.0	460.7	459.0	457.5	454.0	450.7	446.7
7.5°	479.5	481.0	479.5	475.5	473.5	472.0	469.5	467.2	463.2	458.5	453.5
10°	495.0	496.2	494.0	488.7	485.5	483.2	481.0	478.5	474.7	469.5	463.5
12.5°	509.5	511.0	507.5	501.2	497.5	495.2	492.7	490.7	487.0	482.0	475.7
15°	522.7	525.0	519.0	512.2	508.0	506.2	503.7	502.5	500.0	496.5	490.7
17.5°	532.7	534.2	528.0	520.0	515.2	514.0	512.2	513.0	512.5	510.7	507.0
20°	541.2	542.2	534.0	524.2	519.0	519.2	518.7	521.2	522.2	522.2	522.0
22.5°	551.7	552.0	541.5	529.2	523.0	524.7	525.5	528.2	530.2	532.2	536.7
25°	565.5	565.0	552.5	535.7	530.2	532.7	534.5	535.5	537.7	541.0	551.2
27.5°	586.0	584.5	568.5	546.2	539.7	542.0	545.2	544.7	543.7	546.2	563.5
30°	611.9	609.9	588.7	561.0	555.0	557.0	558.0	553.5	546.2	548.5	574.2
32.5°	653.2	649.7	620.2	577.5	568.2	570.5	569.2	560.0	549.2	551.5	585.0
35°	724.9	716.4	674.7	611.9	583.2	580.7	577.7	568.7	555.5	553.2	593.9
37.5°	877.4	862.4	791.2	679.2	617.2	600.9	591.7	582.7	562.2	553.2	604.2
40°	1049.4	1034.2	951.9	791.7	673.7	646.2	624.2	599.2	569.2	556.5	620.2
42.5°	1228.9	1212.1	1127.7	931.2	754.4	697.9	656.9	612.4	580.7	566.5	641.4
45°	1429.4	1408.4	1297.9	1076.7	871.7	783.9	709.7	639.7	600.7	584.2	670.4
47.5°	1640.9	1613.6	1467.6	1217.9	997.9	902.9	806.2	688.4	630.2	610.7	709.7
50°	1828.3	1801.3	1642.9	1365.6	1115.9	1016.2	916.2	755.9	674.4	648.2	762.4
52.5°	1963.1	1942.6	1802.3	1518.1	1238.6	1122.4	1015.9	834.4	730.4	696.2	824.7
55°	2053.3	2034.6	1915.3	1662.6	1381.4	1239.4	1114.2	919.7	797.9	753.7	893.4
57.5°	2108.1	2097.3	1997.1	1791.6	1522.9	1367.4	1226.6	1013.4	877.4	821.4	970.2
60°	2127.6	2118.8	2047.8	1914.6	1693.9	1521.1	1358.9	1119.2	973.9	898.4	1048.9
62.5°	2075.6	2077.3	2084.3	2060.3	1874.1	1701.1	1517.4	1246.1	1080.9	985.7	1122.9
65°	1830.8	1845.3	1978.3	2221.8	2112.8	1926.6	1719.1	1401.1	1203.4	1084.9	1181.6
67.5°	1515.9	1536.9	1702.4	2316.3	2367.3	2219.3	2000.1	1598.6	1349.4	1185.9	1203.9
70°	1160.4	1182.9	1383.4	2296.6	2605.5	2539.3	2347.5	1849.8	1500.6	1255.9	1147.2
72.5°	828.2	839.7	997.7	2120.8	2703.3	2757.3	2603.5	2087.8	1577.9	1217.1	935.7
75°	582.0	580.0	684.7	1707.9	2551.0	2730.8	2513.8	1959.1	1427.9	966.9	577.0
77.5°	253.5	254.0	342.0	1037.2	2036.1	2332.3	2089.6	1227.1	995.4	512.5	243.5
80°	65.7	67.7	125.5	413.0	1225.9	1539.4	1274.4	539.5	460.0	125.0	46.5
82.5°	23.2	24.7	57.7	129.7	452.2	705.9	567.5	172.5	120.0	35.7	12.5
85°	6.7	8.0	31.0	39.7	93.5	199.5	137.7	33.5	29.5	18.5	3.2
87.5°	0.0	1.0	6.2	5.5	5.5	3.7	7.0	3.7	4.7	2.2	1.0
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: P881783

CATALOG NUMBER: NAV-SB1B-835-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	439.5	439.5	439.5	439.5	439.5	439.5	439.5	439.5	439.5	439.5	439.5
2.5°	441.7	440.0	436.2	432.2	428.5	425.0	424.0	420.2	418.5	418.7	418.5
5°	444.0	440.7	433.5	424.7	415.7	405.5	397.0	385.0	374.7	373.5	372.7
7.5°	450.0	444.7	433.0	416.0	393.5	365.2	339.0	313.0	298.2	290.2	289.7
10°	459.2	452.2	434.2	401.7	354.0	303.5	263.7	231.0	214.2	206.5	205.0
12.5°	470.2	462.5	436.2	377.5	303.0	236.7	193.7	173.7	170.2	169.7	169.5
15°	485.7	477.2	438.5	344.7	247.7	180.2	160.5	160.7	163.5	165.0	164.7
17.5°	503.0	494.5	435.2	304.7	193.2	154.0	153.5	155.7	159.7	161.2	161.0
20°	520.5	512.5	423.7	257.7	156.2	146.7	148.7	151.2	155.2	157.2	157.2
22.5°	538.5	531.5	405.5	207.7	141.0	141.5	144.0	146.5	151.0	153.2	153.2
25°	557.7	551.7	381.2	166.5	134.5	136.0	139.2	142.2	147.0	149.7	149.7
27.5°	577.2	572.7	353.7	139.0	128.5	130.2	134.0	138.0	142.7	146.0	146.2
30°	598.4	595.9	331.7	128.7	122.7	124.2	128.5	133.0	138.2	142.2	142.7
32.5°	620.2	619.7	321.0	136.2	117.5	118.5	122.2	126.7	133.2	138.2	138.7
35°	641.7	642.7	314.7	157.5	115.7	113.0	115.5	119.5	127.2	133.5	134.5
37.5°	669.2	671.7	314.5	180.5	120.0	107.5	109.2	112.0	118.7	126.0	127.2
40°	710.2	723.4	330.5	200.2	127.5	102.5	103.0	103.5	107.0	113.0	115.0
42.5°	764.7	803.4	388.2	213.7	130.5	98.0	96.2	93.5	93.0	96.2	98.0
45°	832.4	900.2	489.7	221.2	127.5	93.0	88.2	81.0	78.2	80.5	80.5
47.5°	912.2	1006.2	609.9	223.0	122.5	86.7	78.2	68.7	66.5	67.2	67.0
50°	989.9	1085.7	715.7	208.5	114.2	78.7	67.2	59.2	57.7	58.0	58.0
52.5°	1058.7	1112.9	745.7	174.2	103.2	69.0	57.7	52.2	51.2	51.2	51.0
55°	1104.2	1083.4	664.9	133.2	89.5	59.0	49.5	46.7	46.2	46.0	45.5
57.5°	1113.7	987.4	502.2	96.2	70.0	49.7	44.0	42.5	41.5	40.5	40.0
60°	1079.7	827.4	319.7	67.2	52.5	42.5	39.0	38.0	36.0	34.0	33.2
62.5°	1006.2	624.9	177.0	46.7	42.2	36.2	34.5	33.2	29.5	26.2	25.2
65°	907.4	415.5	78.2	36.5	34.5	30.5	29.5	27.7	23.2	19.5	18.7
67.5°	808.2	239.2	35.2	29.2	27.7	25.0	24.2	23.0	19.7	16.2	15.7
70°	694.9	121.2	24.2	23.2	21.5	19.0	19.7	19.5	16.2	13.2	12.7
72.5°	517.5	60.2	18.2	17.5	15.5	13.5	16.2	16.0	12.7	10.0	9.5
75°	293.0	29.7	13.2	12.2	9.2	10.0	13.0	12.2	8.7	6.5	6.0
77.5°	116.2	15.2	8.7	7.5	5.5	6.7	9.5	8.2	4.5	2.7	2.5
80°	26.7	7.5	4.5	3.2	2.5	4.0	5.0	3.0	1.2	0.2	0.0
82.5°	7.5	3.2	1.5	1.2	1.2	1.5	1.2	0.5	0.0	0.0	0.0
85°	2.5	1.5	0.5	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
87.5°	1.0	0.5	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)