

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: McGRAW-EDISON

Report Number: P833549

Luminaire Tested: **TTN-D2-735-U-WQ-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833549
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TTN-D2-735-U-WQ-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5554.8 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G2

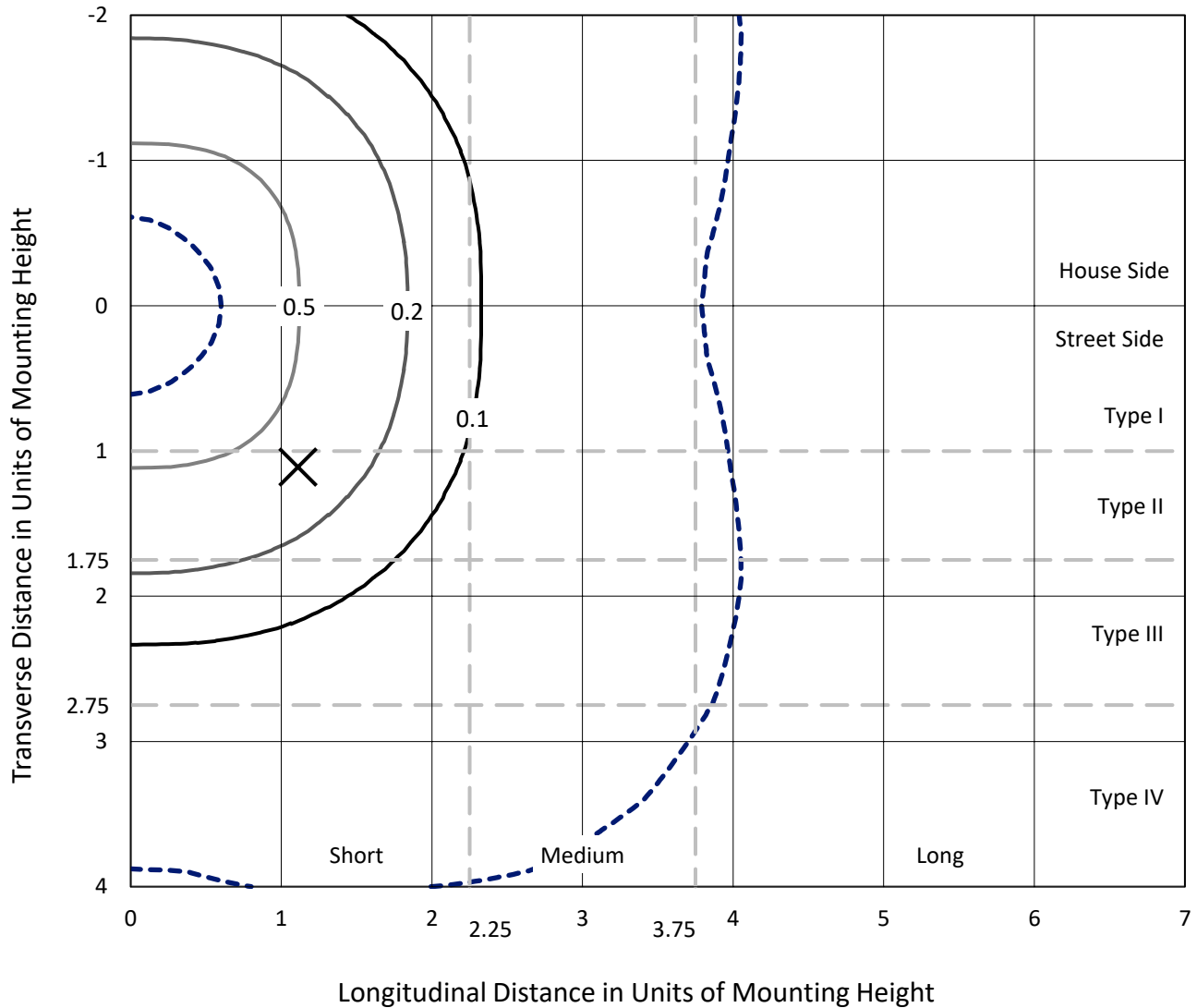
Input Watts (W): 47
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P833549
 CATALOG NUMBER: TTN-D2-735-U-WQ-UPL2

Iso-Footcandle Lines of Horizontal Illumination

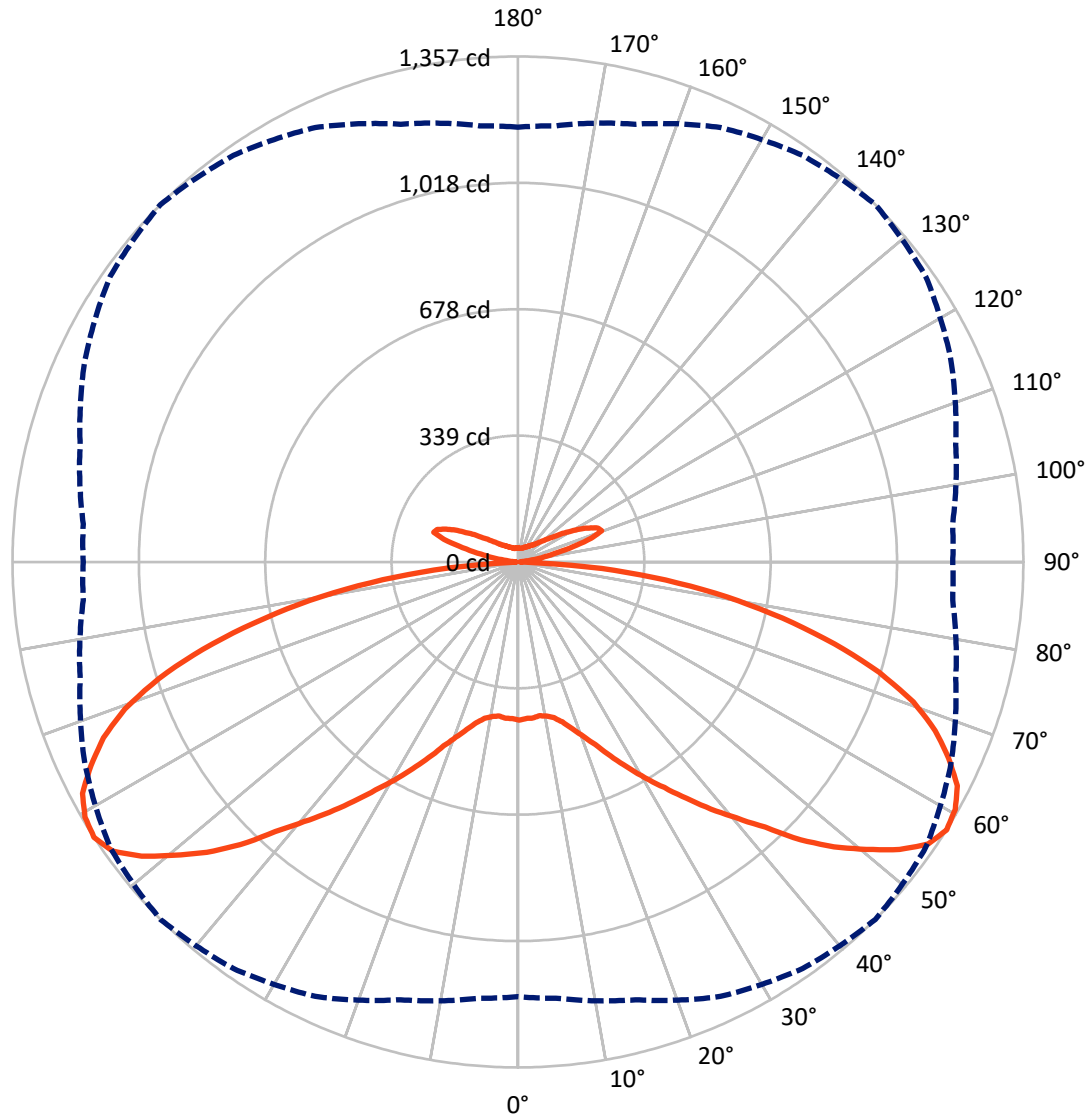
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type V - Short - N/A

REPORT NUMBER: P833549
CATALOG NUMBER: TTN-D2-735-U-WQ-UPL2

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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CATALOG NUMBER: TTN-D2-735-U-WQ-UPL2

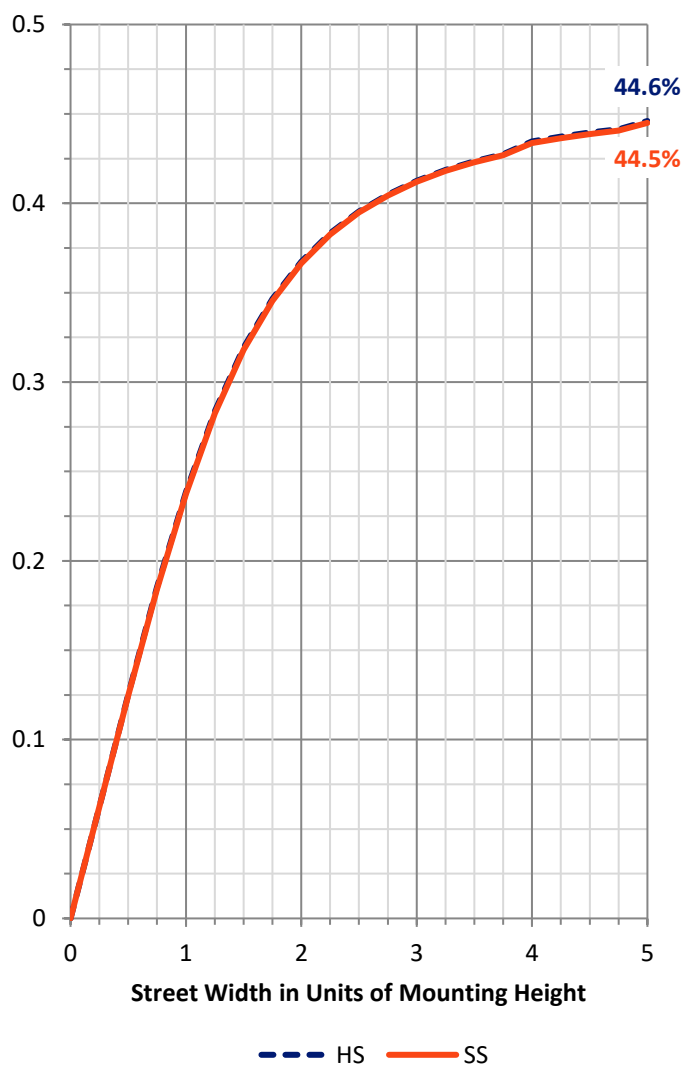
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2505.9	271.5	2777.4
	% Fixture	45.1	4.9	50.0
Street Side	Lumens	2505.9	271.5	2777.4
	% Fixture	45.1	4.9	50.0
Total	Lumens	5011.8	543.0	5554.8
	% Fixture	90.2	9.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.9	0.7
10°-20°	127.4	2.3
20°-30°	267.3	4.8
30°-40°	485.0	8.7
40°-50°	790.6	14.2
50°-60°	1106.6	19.9
60°-70°	1155.2	20.8
70°-80°	825.4	14.9
80°-90°	214.3	3.9
90°-100°	12.1	0.2
100°-110°	123.2	2.2
110°-120°	180.1	3.2
120°-130°	104.5	1.9
130°-140°	55.4	1.0
140°-150°	32.9	0.6
150°-160°	20.2	0.4
160°-170°	11.0	0.2
170°-180°	3.6	0.1
0°-90°	5011.8	90.2
0°-180°	5554.8	100.0

Coefficient of Utilization



REPORT NUMBER: P833549

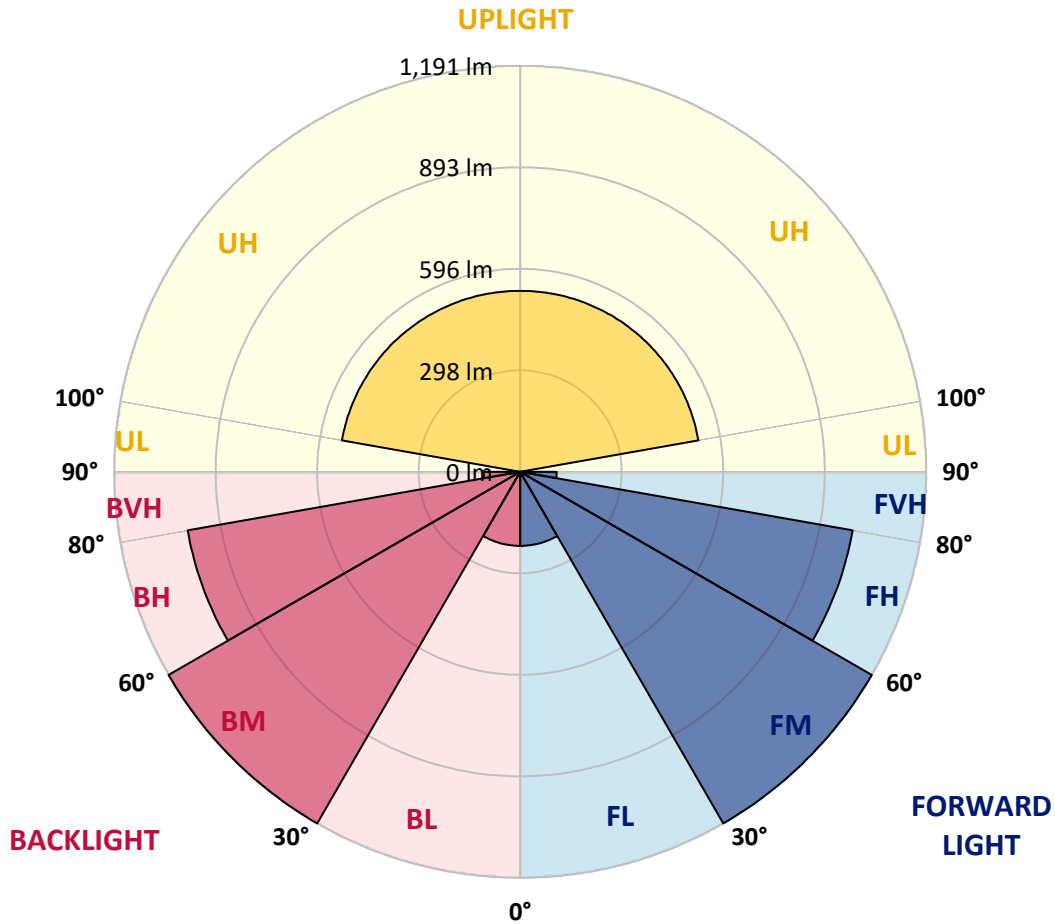
CATALOG NUMBER: TTN-D2-735-U-WQ-UPL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	217.3	3.9			
FM (30°-60°)	1191.1	21.4			
FH (60°-80°)	990.3	17.8			G1/1800
FVH (80°-90°)	107.2	1.9			G2/225
BL (0°-30°)	217.3	3.9	B1/500		
BM (30°-60°)	1191.1	21.4	B2/2500		
BH (60°-80°)	990.3	17.8	B2/1000		G1/1800
BVH (80°-90°)	107.2	1.9			G2/225
UL (90°-100°)	12.1	0.2		U2/50	
UH (100°-180°)	530.9	9.6		U4/1000	

BUG Rating: B2-U4-G2

Type V Short





REPORT NUMBER: P833549

CATALOG NUMBER: TTN-D2-735-U-WQ-UPL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	424.8	424.8	424.8	424.8	424.8	424.8	424.8	424.8	424.8	424.8	424.8
2.5°	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6
5°	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6
7.5°	412.4	412.4	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5
10°	412.4	412.4	416.5	416.5	420.6	420.6	420.6	416.5	416.5	412.4	412.4
12.5°	420.6	420.6	420.6	424.8	428.9	428.9	428.9	424.8	424.8	420.6	420.6
15°	433.0	437.1	437.1	441.2	445.4	445.4	445.4	441.2	441.2	437.1	437.1
17.5°	457.7	457.7	457.7	461.9	466.0	470.1	470.1	461.9	461.9	457.7	461.9
20°	482.5	486.6	486.6	490.7	494.9	499.0	494.9	490.7	486.6	486.6	486.6
22.5°	519.6	519.6	523.7	523.7	532.0	532.0	532.0	523.7	523.7	523.7	523.7
25°	560.8	560.8	565.0	569.1	577.3	577.3	573.2	565.0	565.0	565.0	569.1
27.5°	610.3	610.3	614.4	614.4	622.7	622.7	618.6	614.4	614.4	614.4	618.6
30°	655.7	655.7	663.9	668.1	672.2	672.2	672.2	663.9	663.9	659.8	659.8
32.5°	696.9	701.0	705.2	717.5	725.8	721.7	725.8	717.5	709.3	705.2	705.2
35°	742.3	746.4	754.7	767.0	779.4	779.4	779.4	767.0	758.8	750.5	754.7
37.5°	795.9	795.9	808.3	820.6	837.1	841.3	837.1	824.8	812.4	804.1	804.1
40°	853.6	853.6	866.0	878.4	899.0	903.1	899.0	882.5	866.0	861.9	861.9
42.5°	911.4	911.4	927.9	940.2	965.0	973.2	965.0	944.3	927.9	915.5	919.6
45°	973.2	977.3	998.0	1022.7	1051.6	1063.9	1051.6	1026.8	1002.1	977.3	977.3
47.5°	1043.3	1043.3	1068.1	1096.9	1129.9	1142.3	1125.8	1101.1	1068.1	1047.4	1047.4
50°	1088.7	1092.8	1125.8	1162.9	1204.1	1212.4	1200.0	1162.9	1125.8	1096.9	1092.8
52.5°	1134.0	1138.2	1175.3	1228.9	1270.1	1282.5	1266.0	1228.9	1175.3	1138.2	1138.2
55°	1162.9	1171.2	1212.4	1270.1	1315.5	1336.1	1311.4	1270.1	1208.3	1167.0	1162.9
57.5°	1167.0	1175.3	1216.5	1286.6	1332.0	1356.7	1336.1	1282.5	1216.5	1171.2	1167.0
60°	1158.8	1162.9	1204.1	1278.4	1332.0	1348.5	1332.0	1274.3	1200.0	1162.9	1154.7
62.5°	1138.2	1146.4	1187.7	1249.5	1311.4	1323.7	1307.2	1245.4	1183.5	1138.2	1129.9
65°	1072.2	1080.4	1142.3	1204.1	1257.8	1270.1	1257.8	1204.1	1138.2	1072.2	1063.9
67.5°	998.0	1002.1	1063.9	1138.2	1187.7	1208.3	1187.7	1142.3	1059.8	998.0	989.7
70°	919.6	923.7	973.2	1051.6	1101.1	1125.8	1105.2	1055.7	969.1	915.5	911.4
72.5°	828.9	828.9	878.4	940.2	989.7	1014.5	998.0	936.1	870.1	816.5	808.3
75°	705.2	709.3	762.9	808.3	861.9	878.4	861.9	812.4	750.5	696.9	688.7
77.5°	577.3	581.5	626.8	663.9	713.4	725.8	713.4	672.2	614.4	569.1	565.0
80°	437.1	441.2	478.4	511.4	552.6	569.1	556.7	515.5	470.1	428.9	416.5
82.5°	284.5	288.7	325.8	350.5	387.6	400.0	391.8	354.6	317.5	276.3	272.2
85°	127.8	132.0	165.0	185.6	214.4	226.8	218.6	185.6	156.7	119.6	111.3
87.5°	12.4	12.4	12.4	12.4	12.4	16.5	16.5	12.4	12.4	12.4	12.4
90°	4.6	4.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6
92.5°	4.6	4.6	4.6	6.5	7.4	6.5	7.4	5.6	5.6	4.6	4.6
95°	5.6	5.6	6.5	8.4	10.2	11.1	11.1	6.5	6.5	5.6	5.6
97.5°	7.4	8.4	8.4	10.2	16.7	30.7	18.6	9.3	9.3	8.4	7.4
100°	12.1	13.0	13.0	23.2	49.2	66.0	47.4	24.2	17.7	13.0	13.0
102.5°	39.0	40.9	50.2	75.3	111.5	101.3	85.5	80.8	55.7	44.6	42.7
105°	99.4	98.5	105.9	125.4	156.1	153.3	141.2	128.2	110.6	102.2	102.2
107.5°	131.0	131.0	137.5	154.2	177.4	207.2	210.0	166.3	145.9	136.6	135.6
110°	147.7	147.7	153.3	167.2	197.9	239.7	237.8	205.3	180.2	168.2	166.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	151.4	152.4	159.8	181.2	214.6	233.2	224.8	211.8	200.7	191.4	189.5
115°	157.0	157.0	165.4	185.8	204.4	211.8	202.5	192.3	184.9	181.2	183.0
117.5°	155.1	157.9	159.8	170.9	183.0	188.6	183.9	170.0	164.4	162.6	159.8
120°	144.0	144.0	145.9	151.4	157.9	160.7	158.9	149.6	144.9	144.0	142.1
122.5°	128.2	129.1	128.2	131.0	135.6	138.4	136.6	129.1	127.3	127.3	125.4
125°	112.4	112.4	111.5	113.3	116.1	115.2	116.1	112.4	111.5	111.5	110.6
127.5°	101.3	100.3	98.5	99.4	100.3	100.3	101.3	97.5	98.5	99.4	98.5
130°	90.1	90.1	88.3	88.3	88.3	86.4	88.3	86.4	87.3	88.3	89.2
132.5°	79.9	79.9	77.1	76.2	76.2	76.2	77.1	76.2	78.0	79.9	79.9
135°	71.5	71.5	68.7	69.7	69.7	68.7	69.7	68.7	70.6	71.5	71.5
137.5°	65.0	65.0	63.2	63.2	63.2	62.2	63.2	63.2	64.1	66.0	66.9
140°	59.5	59.5	58.5	58.5	57.6	58.5	58.5	58.5	59.5	60.4	60.4
142.5°	56.7	55.7	54.8	53.9	54.8	54.8	54.8	53.9	54.8	56.7	56.7
145°	52.0	52.0	51.1	51.1	51.1	52.0	51.1	51.1	52.0	52.0	53.0
147.5°	49.2	49.2	48.3	49.2	49.2	49.2	49.2	48.3	49.2	49.2	50.2
150°	48.3	47.4	46.5	47.4	47.4	46.5	46.5	46.5	46.5	47.4	47.4
152.5°	45.5	45.5	44.6	45.5	44.6	44.6	44.6	44.6	44.6	45.5	46.5
155°	43.7	43.7	42.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7
157.5°	41.8	42.7	41.8	41.8	41.8	41.8	41.8	41.8	41.8	42.7	42.7
160°	40.9	40.9	40.9	40.9	39.9	39.9	39.9	40.9	40.9	40.9	41.8
162.5°	39.9	39.9	39.9	39.9	39.0	39.0	39.0	39.0	39.9	39.9	40.9
165°	39.9	39.0	39.0	39.0	38.1	38.1	38.1	38.1	39.0	39.9	39.0
167.5°	38.1	38.1	38.1	38.1	38.1	37.2	37.2	38.1	38.1	38.1	39.0
170°	38.1	38.1	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	38.1
172.5°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	37.2	37.2	38.1	38.1
175°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	38.1	38.1	38.1	37.2
177.5°	38.1	38.1	38.1	38.1	37.2	38.1	38.1	38.1	38.1	38.1	38.1
180°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1

(END OF REPORT)